

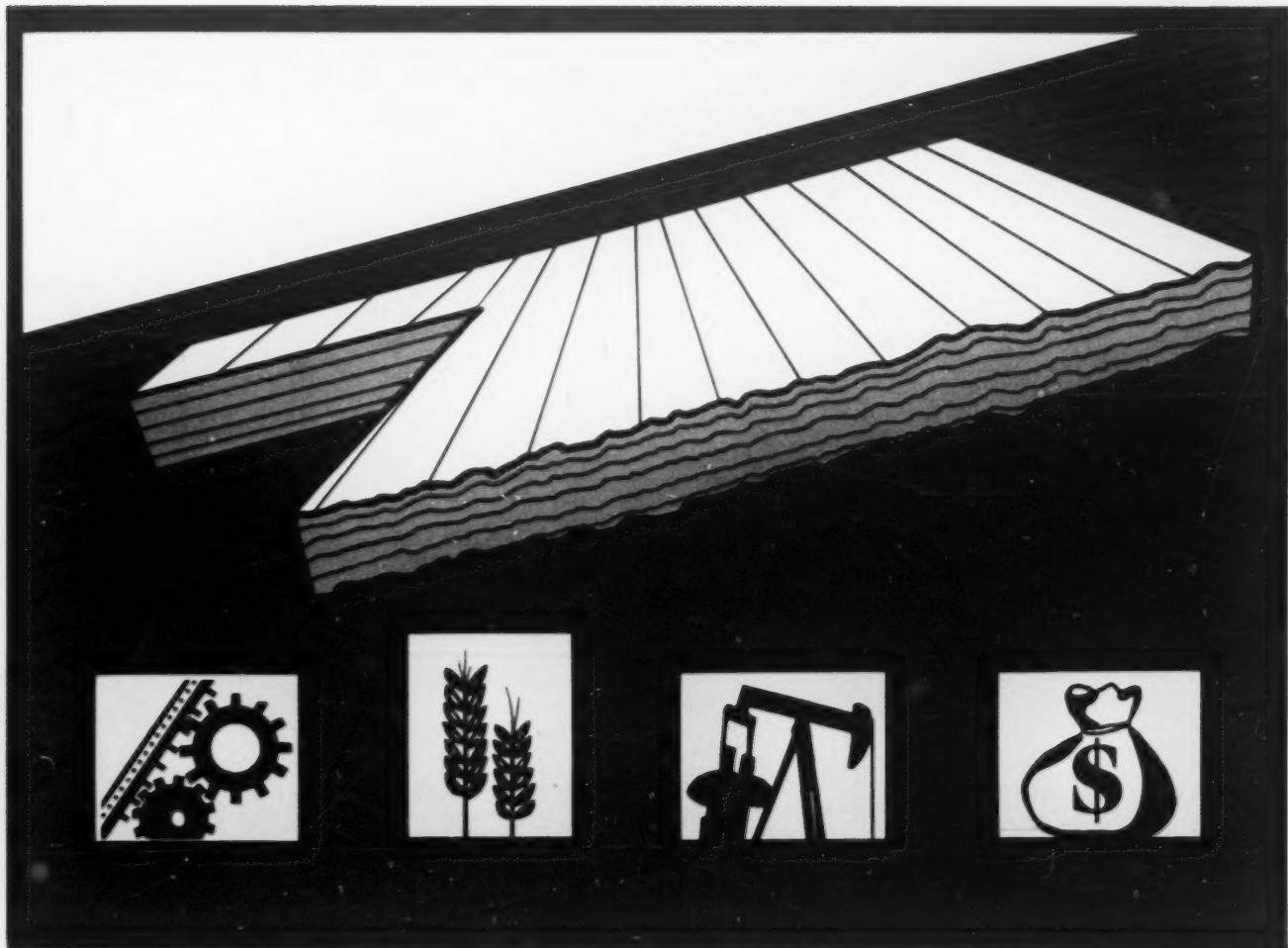
OKLAHOMA BUSINESS BULLETIN

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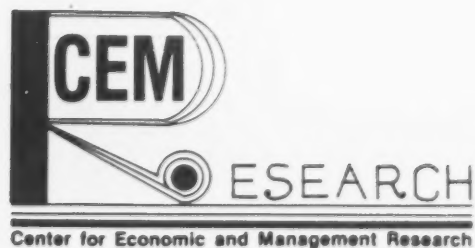


Table of Contents

TABLES

Summary of Indicators	2
Selected Economic Indicators	2
Retail Trade in Metro Areas and State	3
Retail Trade in Selected Cities	4
Metropolitan Area Data	
Enid and Lawton	5
Muskogee	5
Tulsa	6
Oklahoma City	7

ARTICLES

Business Highlights	8
<i>David Penn</i>	
An Analysis of Oklahoma's Economy	10
<i>Craig Knutson</i>	
An Overview of State and Local Government in Oklahoma	20
<i>Larkin Warner</i>	
Oklahoma's Widening Personal Income Gap	29
<i>Gerald M. Lage</i>	

SUMMARY OF INDICATORS

Category	9 Mos. '89	9 Mos. '88	Sept. '89	Percentage Change	
				9 Mos. '89/'88	Sept./Aug. '89
Personal Income (Monthly Average)					
Unadjusted (\$000,000)	3,795	3,582	3,865	5.9	0.3
Adjusted for CPI (\$000,000)	3,078	3,046	3,092	1.0	-0.2
Crude Oil Production (000 bbl)^a	72,708	80,461	8,801	-9.4	-2.6
Natural Gas Production (000 mcf)^a	1,394,899	1,410,805	157,147	-1.1	-11.2
Industrial Power Sales (000,000 Kwh)^b	6,624	6,413	792	3.3	0.5
Total Bank Deposits (Monthly Average) (\$000,000)^c					
Demand	7,405	7,571	7,303	-2.2	0.8
Savings	23,519	24,469	23,371	-3.9	-0.4
Savings and Loan Associations (\$000,000)					
Assets	10,629	10,451	10,321	1.7	2.0
Mortgage Loans Closed	377.9	496.9	39.3	-24.0	-18.0
General Business Index	96.3	94.7	97.2	1.7	-0.9

Note: Includes revisions.

^aEight months and August data. Natural gas includes casinghead gas.^bSales of larger privately owned utility companies.^cTotal deposits of all depository institutions.

SELECTED ECONOMIC INDICATORS

Category	9 Mos. '89	9 Mos. '88	Sept. '89	Percentage Change	
				9 Mos. '89/'88	Sept./Aug. '89
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value (\$000)	262,911	201,315	24,797	30.6	-19.2
Number of Units	3,172	2,698	295	17.6	-22.6
Residential—Multi Family					
Dollar Value (\$000)	22,712	5,651	383	301.9	-53.9
Number of Units	528	277	10	90.6	-61.5
Nonresidential					
Commercial (\$000)	93,406	119,063	26,044	-21.6	150.9
Industrial (\$000)	21,034	25,817	1,635	-18.5	-25.8
Institutional (\$000)	82,548	32,087	7,028	157.3	81.8
Nonbuilding					
Streets and Highways (\$000)	212,388	234,490	11,364	-9.4	-31.1
All Other Nonbuilding (\$000)	5,225	5,357	465	-2.5	-29.3
Total Construction (\$000)	700,224	623,781	71,717	12.2	10.1
EMPLOYMENT TRENDS					
Total Labor Force (000) ^a	1,528.0	1,533.4	1,525.3	-0.4	-2.0
Total Employment (000)	1,437.8	1,425.9	1,446.1	0.8	-2.3
Unemployment Rate (%)	5.9	7.0	5.2	—	—
Wage and Salary Employment (000)	1,136.7	1,129.2	1,139.5	0.7	0.7
Manufacturing (000)	163.9	162.1	164.0	1.1	-0.7
Mining (000)	43.8	45.1	43.9	-2.9	-1.1
Government (000)	247.4	246.5	245.2	0.4	5.2
Contract Construction (000)	33.8	34.8	35.2	-2.9	-0.8
Services (000)	251.6	246.9	256.0	1.9	0.2
Retail Trade (000)	217.4	213.4	217.3	1.9	-0.3
Average Weekly Hours (Per Worker)					
Manufacturing	41.3	40.9	41.9	1.0	0.5
Average Weekly Earnings (\$ Per Worker)					
Manufacturing	437.93	420.08	447.07	4.2	2.4
Contract Construction	421.81	427.28	412.18	-1.3	-6.9
Retail Trade ^b	192.72	190.67	198.13	1.1	1.0

Note: Includes revisions in some previous months.

^aCivilian Labor Force.^bExcluding eating and drinking places.

RETAIL TRADE IN METRO AREAS AND STATE
(\$000)

Retail Trade	9 Mos. '89	9 Mos. '88	Sept. '89		Percentage Change		
	Adjusted	Adjusted	Adjusted	Unadjusted	9 Mos. '89/'88	Sept./Aug. '89	Unadjusted
OKLAHOMA CITY MSA							
Food Group	1,472,803	1,377,851	164,071	166,745	6.9	5.3	1.6
Apparel Group	253,004	246,035	31,430	29,448	2.8	-0.3	-0.1
General Merchandise Group	881,510	875,265	101,072	86,938	0.7	4.8	-6.5
Furniture Group	218,599	199,403	24,036	24,471	9.6	0.1	1.2
Lumber Group	138,505	156,500	15,651	16,821	-11.5	2.9	-0.9
Auto Dealers	1,077,956	1,304,377	123,600	126,806	-17.4	10.3	12.6
Gasoline	313,087	292,063	36,128	38,112	7.2	11.5	13.1
All Other	329,142	313,684	41,689	42,445	4.9	1.0	-5.8
Total	4,684,606	4,765,178	537,677	531,786	-1.7	5.7	2.5
TULSA MSA							
Food Group	1,093,486	1,033,777	126,539	124,598	5.8	3.7	-1.7
Apparel Group	173,527	177,920	21,605	20,403	-2.5	2.7	-4.3
General Merchandise Group	678,669	638,346	84,050	74,889	6.3	2.9	-5.0
Furniture Group	161,892	162,116	17,117	16,093	-0.1	-17.0	-12.3
Lumber Group	133,980	126,767	15,326	15,756	5.7	-3.9	-5.6
Auto Dealers	673,886	816,698	78,192	79,610	-17.5	10.5	12.6
Gasoline	192,254	179,244	21,635	23,353	7.3	10.9	13.1
All Other	177,447	179,603	20,848	20,481	-1.2	4.6	-3.2
Total	3,285,141	3,314,471	385,312	375,183	-0.9	3.7	0.2
ENID MSA							
Food Group	81,568	75,679	9,634	9,554	7.8	-0.3	-4.7
Apparel Group	14,848	14,614	1,845	1,709	1.7	3.8	5.5
General Merchandise Group	65,973	64,352	8,727	7,287	2.5	12.1	-0.4
Furniture Group	9,981	10,620	1,099	1,047	-6.0	1.9	1.7
Lumber Group	9,144	8,412	1,179	1,224	8.7	9.8	11.9
Auto Dealers	48,037	58,123	5,454	5,639	-17.4	9.6	12.6
Gasoline	17,950	16,734	2,029	2,186	7.3	10.9	13.1
All Other	16,636	16,535	1,396	1,759	0.6	-18.6	-12.8
Total	264,147	265,069	31,363	30,405	-0.3	4.9	1.2
LAWTON MSA							
Food Group	114,764	118,279	11,816	11,057	-3.0	21.1	3.5
Apparel Group	18,649	18,439	2,293	2,257	1.1	2.9	-1.1
General Merchandise Group	110,593	112,430	13,084	11,079	-1.6	3.3	-9.8
Furniture Group	19,167	20,273	2,194	2,077	-5.5	6.9	3.5
Lumber Group	16,896	17,522	2,039	2,064	-3.6	5.3	-3.6
Auto Dealers	84,994	102,889	9,788	10,013	-17.4	10.4	12.6
Gasoline	27,221	25,411	3,280	3,339	7.1	12.9	13.2
All Other	18,086	19,034	1,154	1,186	-5.0	-26.3	-4.6
Total	410,370	434,277	45,648	43,072	-5.5	8.7	1.4
MUSKOGEE AREA							
Food Group	86,712	82,068	10,229	10,575	5.7	12.6	9.8
Apparel Group	19,317	17,626	2,197	2,131	9.6	-16.8	-15.7
General Merchandise Group	51,225	52,042	6,452	5,676	-1.6	-2.2	-9.2
Furniture Group	8,982	7,908	822	767	13.6	-22.7	-35.6
Lumber Group	9,057	8,561	1,178	1,220	5.8	-6.7	-8.3
Auto Dealers	42,004	50,877	4,784	4,936	-17.4	9.8	12.6
Gasoline	20,013	18,646	2,309	2,437	7.3	11.4	13.1
All Other	14,049	15,345	1,322	1,597	-8.4	20.0	10.6
Total	251,359	253,073	29,293	29,339	-0.7	4.0	1.5
STATE*							
Durable Goods	3,874,641	4,455,265	438,453	442,001	-13.0	1.8	0.3
Auto Dealers	2,522,388	3,053,225	289,589	296,854	-17.4	10.2	12.6
Accessory Dealers	285,830	276,428	32,834	31,958	3.4	-0.5	-10.7
Total Automotive	2,808,218	3,329,653	322,423	328,812	-15.7	9.0	9.8
Furniture	337,905	298,860	34,683	34,328	13.1	-38.2	-40.8
Household Appliances	197,760	217,628	22,232	22,139	-9.1	2.5	0.2
Total Furniture and Appliances	535,665	516,488	56,915	56,467	3.7	-26.9	-29.5
Lumber and Building Materials	421,295	430,259	49,174	51,515	-2.1	-2.0	-7.1
Hardware Stores	52,189	50,117	5,969	5,633	4.1	-1.5	-5.5
Total Lumber, Building Materials & Hardware	473,484	480,376	55,143	57,148	-1.4	-1.9	-7.0
Nondurable Goods	8,519,190	8,143,817	981,951	944,473	4.6	6.3	-2.5
Apparel	637,189	634,328	75,087	70,854	0.5	-3.7	-7.3
Drug Stores	329,012	313,696	36,563	34,584	4.9	-0.9	-2.9
Eating and Drinking Places	1,274,252	1,203,799	145,252	143,458	5.9	3.9	-2.2
Food Group	2,773,717	2,662,952	311,628	305,714	4.2	11.8	-1.3
Gasoline	918,913	857,052	105,107	111,708	7.2	11.2	13.1
General Merchandise Group	2,054,187	1,913,156	245,489	214,701	7.4	4.4	-8.0
Total Retail Trade	12,393,831	12,599,082	1,420,404	1,386,474	-1.6	4.9	-1.6

*Total includes data for categories not shown in the table.

RETAIL TRADE IN SELECTED CITIES (\$000)

Retail Trade	Percentage Change						
	9 Mos. '89	9 Mos. '88	Sept. '89		9 Mos. '89/'88	Sept./Aug. '89	
	Adjusted	Adjusted	Adjusted	Unadjusted	Adjusted	Adjusted	Unadjusted
Ada	109,241	110,317	12,566	12,242	-1.0	3.0	-2.1
Altus	107,951	113,291	13,383	12,859	-4.7	15.5	10.2
Alva	31,753	33,957	3,639	3,569	-6.5	9.1	2.5
Anadarko	35,511	37,049	3,876	3,746	-4.2	8.3	-2.4
Ardmore	158,020	164,217	19,102	18,060	-3.8	14.6	4.6
Bartlesville	214,640	215,321	24,985	23,601	-0.3	2.2	-4.6
Blackwell	25,937	27,540	3,110	3,034	-5.8	12.6	8.4
Broken Arrow	227,136	231,167	27,061	26,160	-1.7	7.5	5.1
Chickasha	88,072	93,784	9,923	9,808	-6.1	1.5	0.2
Clinton	57,091	61,158	6,822	6,626	-6.6	16.0	11.7
Cushing	40,381	43,488	4,617	4,549	-7.1	4.4	4.5
Del City	80,525	84,729	9,119	8,978	-5.0	-0.5	-4.7
Duncan	141,883	159,017	16,681	15,774	-10.8	7.6	1.2
Durant	79,545	84,299	9,669	9,497	-5.6	31.1	21.8
Edmond	209,585	207,188	23,427	23,174	1.2	8.1	0.2
Elk City	67,751	70,160	8,424	8,063	-3.4	17.3	8.3
El Reno	77,269	78,608	8,775	8,646	-1.7	5.3	2.7
Guthrie	50,976	54,256	5,869	5,687	-6.0	11.9	1.3
Guyton	45,709	45,497	5,889	5,765	0.5	18.1	11.4
Henryetta	31,813	33,644	3,483	3,341	-5.4	11.1	0.1
Hobart	22,226	23,499	2,842	2,727	-5.4	20.9	14.6
Holdenville	20,011	21,787	2,346	2,306	-8.2	8.9	5.3
Hugo	33,749	35,557	4,355	4,114	-5.1	21.0	16.4
Idabel	46,812	47,952	5,693	5,426	-2.4	13.3	2.1
Lawton	381,584	407,407	42,481	39,847	-6.3	8.7	0.6
McAlester	110,221	116,428	13,339	12,844	-5.3	14.0	8.9
Miami	91,971	96,333	10,559	10,348	-4.5	2.2	2.7
Midwest City	399,314	416,810	47,245	44,341	-4.2	4.9	-0.3
Moore	138,555	153,308	16,481	15,874	-9.6	7.4	3.5
Muskogee	234,159	237,261	26,622	26,509	-1.3	3.9	1.3
Norman	442,126	463,199	49,892	50,684	-4.5	5.8	2.2
Oklahoma City	2,367,590	2,459,517	274,371	269,203	-3.7	5.8	4.0
Okmulgee	48,116	50,707	5,658	5,576	-5.1	8.4	5.1
Pauls Valley	45,113	47,916	4,701	4,467	-5.8	-3.6	-12.2
Pawhuska	16,413	16,832	1,873	1,859	-2.5	14.8	5.4
Ponca City	156,063	152,534	18,771	18,678	2.3	9.4	8.1
Poteau	53,089	56,482	6,078	5,950	-6.0	0.8	0.3
Sand Springs	82,657	82,158	9,695	9,224	0.6	4.8	-0.4
Sapulpa	81,577	84,032	9,072	9,027	-2.9	7.9	4.6
Seminole	41,261	44,332	4,624	4,449	-6.9	6.1	-0.7
Shawnee	200,583	195,907	21,939	21,584	2.4	1.3	-0.9
Stillwater	162,156	164,699	17,534	17,834	-1.5	-0.9	-12.5
Tahlequah	69,731	70,632	8,031	7,946	-1.3	3.8	-0.9
Tulsa	2,393,045	2,436,503	279,640	273,867	-1.8	2.7	0.2
Watonga	13,021	13,016	1,441	1,471	0.0	10.8	5.9
Weatherford	62,240	62,966	7,649	7,541	-1.2	9.9	5.1
Wewoka	12,250	13,330	1,400	1,422	-8.1	6.8	9.2
Woodward	97,262	101,548	11,463	10,932	-4.2	9.6	1.9
Total Selected Cities	9,703,684	10,021,339	1,126,215	1,099,229	-3.2	5.7	1.9

Sources for all tables: Local utilities companies; 10th Federal Reserve District Member Banks; Federal Home Loan Bank of Topeka; Oklahoma Employment Security Commission; United States Department of Commerce, Construction Statistics Division; Oklahoma Department of Transportation, *Progressive Report of the Transportation Director*; Center for Economic and Management Research, College of Business Administration, The University of Oklahoma. The data for all tables were compiled by Marjorie E. Earley, Statistician for CEMR and Brian Hickey, Research Assistant.

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ENID AND LAWTON MSAs

Category	9 Mos. '89	9 Mos. '88	Sept. '89	Percentage Change	
				9 Mos. '89/'88	Sept./Aug. '89
ENID MSA					
Employment (Number)					
Labor Force ^a	28,208	28,917	27,825	-2.5	-4.0
Total Employment	25,728	27,194	26,650	-5.4	-4.3
Unemployment Rate (%)	4.8	5.9	4.2	—	—
Wage and Salary Employment	21,200	21,544	21,200	-0.5	-1.6
Wholesale and Retail Trade	6,000	6,300	6,000	-4.8	0.0
Manufacturing	1,522	1,567	1,500	-2.9	-6.2
Industrial Power Sales (000 Kwh)	342,772	348,015	37,424	-1.5	-7.8
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value (\$000)	778	570	140	36.5	—
Number of Units	7	6	1	16.7	—
Residential—Multi Family					
Dollar Value (\$000)	300	0	0	—	0.0
Number of Units	6	0	0	—	0.0
Nonresidential					
Commercial (\$000)	1,426	804	12	77.5	-91.8
Industrial (\$000)	159	0	0	—	—
Institutional (\$000)	0	300	0	—	0.0
Nonbuilding					
Streets and Highways (\$000)	5,358	2,692	0	99.0	—
All Other Nonbuilding (\$000)	322	152	180	111.8	—
Total Construction (\$000)	8,345	4,519	332	84.7	-48.2
LAWTON MSA					
Employment (Number)					
Labor Force ^a	48,897	49,125	48,875	-0.5	-3.2
Total Employment	46,492	46,194	46,625	0.6	-3.7
Unemployment Rate (%)	4.9	6.0	4.6	—	—
Wage and Salary Employment	33,978	33,733	34,100	0.7	0.3
Industrial Power Sales (000 Kwh)	154,863	149,580	20,100	3.5	9.0
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value (\$000)	4,976	10,435	115	-52.3	-81.7
Number of Units	51	135	1	-62.2	-85.7
Residential—Multi Family					
Dollar Value (\$000)	0	180	0	—	0.0
Number of Units	0	6	0	—	0.0
Nonresidential					
Commercial (\$000)	1,777	3,522	0	-49.6	0.0
Industrial (\$000)	191	830	0	-77.0	0.0
Institutional (\$000)	0	1,390	0	—	0.0
Nonbuilding					
Streets and Highways (\$000)	3,292	7,962	1,227	-70.0	487.5
All Other Nonbuilding (\$000)	38	0	0	—	0.0
Total Construction (\$000)	9,373	24,318	1,342	-61.5	60.1

Note: Includes revisions.

^aCivilian Labor Force.

MUSKOGEE MA

Category	9 Mos. '89	9 Mos. '88	Sept. '89	Percentage Change	
				9 Mos. '89/'88	Sept./Aug. '89
Employment (Number)					
Labor Force ^a	31,686	32,047	30,975	-1.1	-3.1
Total Employment	29,394	28,856	29,150	1.9	-3.3
Unemployment Rate (%)	7.3	10.0	5.9	—	—
Industrial Power Sales (000 Kwh)	129,281	130,316	17,137	-0.8	30.9
Port of Muskogee					
Tons in	93,405	68,344	14,343	36.7	-19.5
Tons out	49,870	19,612	13,022	154.3	76.0
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value (\$000)	2,960	216	329	E	0.0
Number of Units	45	2	2	E	0.0
Residential—Multi Family					
Dollar Value (\$000)	102	0	51	—	0.0
Number of Units	4	0	2	—	0.0
Nonresidential					
Commercial (\$000)	1,083	400	192	170.8	0.0
Industrial (\$000)	0	0	0	0.0	0.0
Institutional (\$000)	277	0	0	—	0.0
Nonbuilding					
Streets and Highways (\$000)	1,098	3,160	178	-65.3	53.4
All Other Nonbuilding (\$000)	0	4	0	—	0.0
Total Construction (\$000)	5,519	3,780	750	46.0	9.1

Note: Includes revisions.

^aCivilian Labor Force.

E = Exceeds 600 percent.

TULSA MSA

Category	9 Mos. '89	9 Mos. '88	Sept. '89	Percentage Change	
				9 Mos. '89/'88	Sept./Aug. '89
Employment (Number)					
Labor Force ^a	346,000	341,800	346,000	1.2	-2.2
Total Employment	322,622	315,322	327,400	2.3	-2.7
Unemployment Rate (%)	6.2	7.8	5.4	—	—
Wage and Salary Employment	300,422	295,656	304,700	1.6	0.7
Manufacturing	49,567	49,300	50,100	0.5	0.8
Mining	14,489	14,244	14,600	1.7	-0.7
Government	36,800	36,778	36,900	0.1	1.6
Wholesale and Retail Trade	70,711	70,556	71,000	0.2	-0.3
Average Weekly Earnings					
Manufacturing (\$ Per Worker)	444.88	445.42	460.57	-0.1	2.7
Industrial Power Sales (000 Kwh)	1,791,662	1,684,270	220,202	6.4	-1.2
Mortgage Loans Closed (\$000,000)^b	122	166	21	-26.3	9.0
Bank Deposits (\$000,000)^c					
Demand Deposits	922	903	886	2.1	1.5
Time and Savings Deposits	2,060	2,169	1,938	-5.0	-2.3
Air Transportation					
Passengers Enplaning (Number)	1,071,917	1,022,801	111,428	4.8	-20.7
Passengers Deplaning (Number)	1,097,013	1,030,362	114,811	6.5	-22.9
Freight (Tons)	20,020	16,457	2,321	21.6	-11.6
Water Transportation					
Tulsa Port of Catoosa					
Tons In	490,349	356,646	52,099	37.5	-24.8
Tons Out	866,988	835,967	80,078	3.7	-41.3
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value (\$000)	108,370	83,474	11,114	29.8	-11.2
Number of Units	1,374	1,095	134	25.5	-17.8
Residential—Multi Family					
Dollar Value (\$000)	234	1,374	152	-83.0	—
Number of Units	8	75	4	-89.3	—
Nonresidential					
Commercial (\$000)	18,973	57,432	648	-67.0	-48.0
Industrial (\$000)	15,631	5,297	1,570	195.1	6.9
Institutional (\$000)	12,998	16,004	1,498	-18.8	E
Nonbuilding					
Streets and Highways (\$000)	33,790	62,312	4,818	-45.8	34.3
All Other Nonbuilding (\$000)	2,997	1,835	252	63.3	-51.6
Total Construction	192,992	231,854	20,051	-16.8	3.2
General Business Index	93.0	88.3	94.0	5.4	0.2

Note: Includes revisions.

^aCivilian Labor Force.^bBy Savings and Loan Associations, 8 months and August data.^cDeposits of large commercial banks (accounted for 50 percent of all commercial bank deposits as of December 31, 1988).

E = Exceeds 600 percent.

OKLAHOMA CITY MSA

Category	9 Mos. '89	9 Mos. '88	Sept. '89	Percentage Change	
				9 Mcs. '89/'88	Sept./Aug. '89
Employment (Number)					
Labor Force ^a	492,656	498,900	490,200	-1.3	-2.2
Total Employment	468,544	469,833	467,700	-0.3	-2.5
Unemployment Rate (%)	5.0	5.8	4.6	—	—
Wage and Salary Employment	406,200	407,211	408,300	-0.2	1.2
Manufacturing	49,400	48,533	49,400	1.8	-0.6
Mining	10,267	11,944	10,300	-14.0	0.0
Government	97,300	95,278	98,300	2.1	4.1
Wholesale and Retail Trade	101,056	100,556	101,100	0.5	-0.1
Average Weekly Earnings					
Manufacturing (\$ Per Worker)	490.68	467.83	493.02	4.9	0.9
Industrial Power Sales (000 Kwh)	945,590	914,881	114,659	3.4	-1.9
Mortgage Loans Closed (\$000,000)^b	64	72	8	-10.4	59.6
Bank Deposits (\$000,000)^c					
Demand Deposits	798	821	776	-2.8	4.5
Time and Savings Deposits	1,156	1,136	1,120	1.8	-1.5
Air Transportation					
Passengers Enplaning (Number)	1,162,825	1,119,094	123,175	4.0	-17.1
Passengers Deplaning (Number)	1,176,862	1,130,387	122,146	4.1	-20.5
Freight Enplaned (Tons)	5,456	5,935	541	-8.1	-20.8
Freight Deplaned (Tons)	7,424	8,244	1,022	-10.1	11.3
PERMIT-AUTHORIZED CONSTRUCTION					
Residential—Single Family					
Dollar Value (\$000)	128,004	87,599	11,578	46.1	-29.4
Number of Units	1,479	1,222	133	21.0	-3.0
Residential—Multi Family					
Dollar Value (\$000)	21,816	1,374	0	E	—
Number of Units	504	75	0	572.0	—
Nonresidential					
Commercial (\$000)	56,016	57,432	24,958	-2.5	228.6
Industrial (\$000)	3,738	5,297	0	-29.4	—
Institutional (\$000)	60,559	16,004	3,980	278.4	209.8
Nonbuilding					
Streets and Highways (\$000)	23,005	62,311	2,339	-63.0	-33.8
All Other Nonbuilding (\$000)	1,643	1,835	26	-10.5	E
Total Construction (\$000)	294,782	231,854	42,881	27.1	41.9
General Business Index	94.7	92.2	94.1	2.7	0.4

Note: Includes revisions.

^aCivilian Labor Force.^bBy Savings and Loan Associations, 8 months and August data.^cDeposits of large commercial banks (accounted for 35 percent of all commercial bank deposits as of December 31, 1988).

E = Exceeds 600 percent.

Retail Trade Revisions

One of the most important business indicators compiled and published by the Center for Economic and Management Research (CEMR) is its monthly estimate of retail sales. These data provide not only trends in retail activity by type of merchandise sold but also seasonal patterns and trends for selected areas and towns.

Periodically, as new census data benchmarks are developed, estimates of state and local retail sales must be revised to reflect changes in census definitions since the previous survey. The *Census of Retail Trade, Oklahoma, 1982* has been used since July 1985 as the basis for estimating monthly retail sales in Oklahoma. However, CEMR has recently updated its estimates so that they are based on the *Census of Retail Trade, Oklahoma, 1987* which was published earlier this year and contains the most current information available.

The monthly percent changes remain the same, however, the magnitude of the 1987 base will differ, especially in the state's smaller towns.

The Center will be pleased to provide monthly revisions for 1987 to the present time for those who maintain their own data banks.

Business Highlights

DAVID PENN

THE STATE'S ECONOMY limped along through the third quarter of 1989, showing only slight gains in economic activity. Job growth compared with one year ago was virtually nil and consumers stayed away from purchases of autos and other durable goods.

As measured by wage and salary employment, net job growth was virtually nil in the third quarter compared with the same period of 1988. A very modest 1,700 gain in the number of private sector jobs was substantially offset by a decline of 1,200 jobs in the government sector.

The third quarter performance of wage and salary employment further lowered the already low rate of employment growth experienced this year. During the first nine months of 1989, wage and salary employment rose just 0.7 percent compared with 1988. Although manufacturing and services employment continued to rise, the rate of increase was smaller than that of 1988. The expansionary effect of gains in these two sectors were dampened by very low growth in the very large government sector.

But a slowdown in job growth does not necessarily suggest the beginning of a new economic slump. Rather, the low rates of employment growth experi-

enced in the State during the first nine months of the 1989 helps to place the year 1988 in perspective. The rapid gains achieved in 1988 followed several years of job decline and erosion of the State's economic base. One could argue the 1988 job gains were proportionally large because the economy had been in such a slump, suggesting that further job increases will occur more slowly in the future.

Additional, but mixed, evidence of slower growth in the State's economy may be found in retail sales for the first nine months of 1989. Total retail trade fell by 1.7 percent mainly due to the falling value of auto sales which declined by 17.4 percent. In the third quarter, total retail sales were down by 4.0 percent compared with the third quarter of 1988.

The large percentage decline was not due so much to sluggish sales in 1989 as to very large auto sales in 1988 which were not duplicated in 1989. Auto dealers were coming off a very big year in 1988; even a good year in 1989 would probably be smaller than 1988.

Removing auto sales from retail sales numbers shows the underlying strength in consumer purchases in Oklahoma. For example, the table shows the percent change in retail sales in Oklahoma

for major metropolitan areas and the State from the third quarter 1988 to third quarter 1989. The effect of auto sales on total retail sales is dramatic: most areas show large declines when auto sales are included but significant increases when auto sales are excluded.

**Retail Sales, State and Selected Cities
Percent Change 1988: III-1989: III**

Area	With Autos	Without Autos
State	-5.3%	4.3%
Oklahoma City MSA	-5.5	3.6
Tulsa MSA	-2.0	7.2
Lawton MSA	-9.1	-2.6
Enid MSA	-1.8	6.1
Muskogee MA	-0.7	7.1

Note: Calculations based on seasonally adjusted data.

Retail sales still show significant volatility even after removing auto sales due to the instability of durable goods purchases. Spending for durable goods tends to occur in spurts; during downturns in the economy, consumers will put off spending on big-ticket items such as refrigerators and furniture, causing sales of durable goods to plummet. As shown in the graph, this clearly occurred in Oklahoma during 1986

and 1987. Durables rapidly recovered during the upturn in 1988 as households replaced worn-out or obsolete durable goods. In contrast, spending for non-durables such as gasoline and food was much less volatile during the same period. Non-durables have shown relative stability since late 1988.

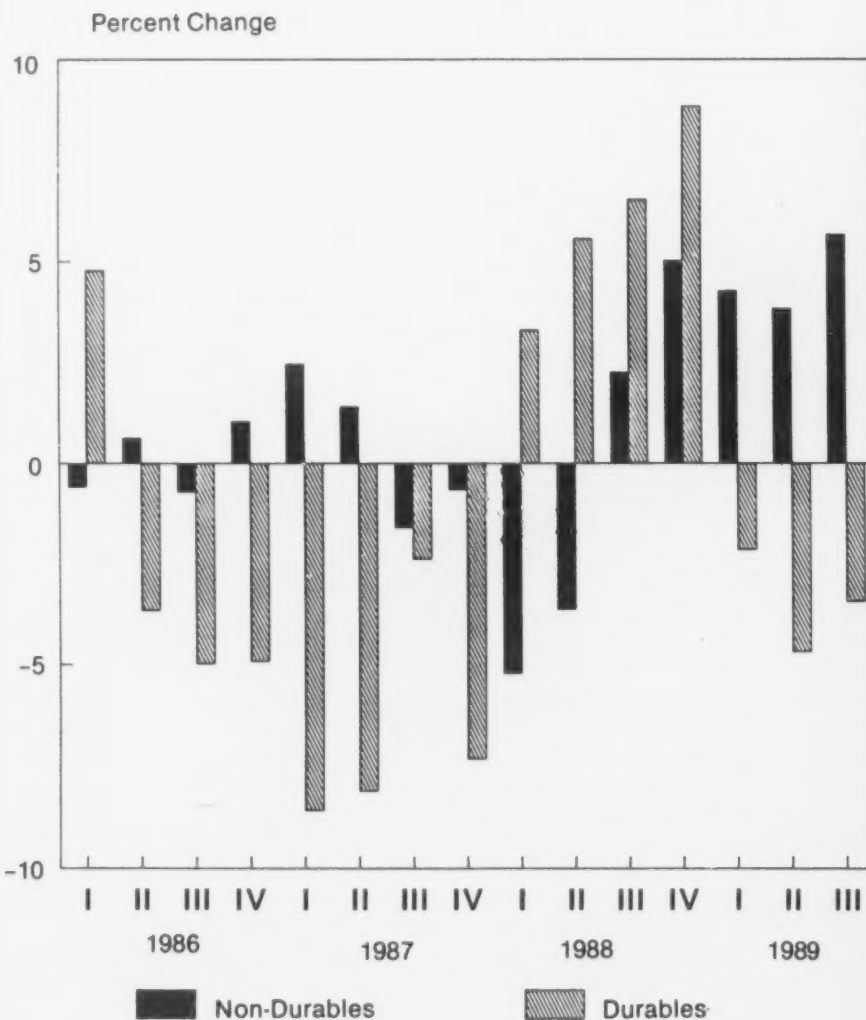
An additional explanation for slow job growth in Oklahoma is the performance of the national economy during 1989. Several indicators suggest a slowing of the rate of growth of the national economy:

- Inflation-adjusted consumer expenditures grew at a slower rate during the first three quarters of 1989, rising by average of 3.2 percent compared with 4.0 percent for 1988.
- The combined effect of higher interest costs and increased compensation of employees caused corporate profits to fall during the first half of the year.
- The capacity utilization rate of industry levelled off following two years of increases.
- As measured by rates on three-month Treasury bills, interest rates fell somewhat during the third quarter but still are higher than last year.

The severity and length of the period of slower national economic activity will depend to a great extent on the monetary policy exercised by the Federal Reserve Board. Monetary policy seemed to ease in the third quarter as suggested by higher growth rates for the money supply and a decline of interest rates. At the same time, however, the announced goal of the Fed's chairman of zero inflation may cause a reversal of the recent easing, generating higher pressure on interest rates and slowing the national economy further.

David Penn is Assistant Director for the Center for Economic and Management Research.

Growth of Quarterly Retail Sales from Previous Year, Excluding Autos



Data: Center for Economic and Management Research.

An Analysis of Oklahoma's Economy

CRAIG KNUTSON

THE FOLLOWING IS AN analysis of the economy for Oklahoma and its two largest metros during the 2nd quarter 1989. The analysis will cover seven subsectors of the economy, with the subsector carrying the greatest amount of weight first, followed by the remaining subsectors in decreasing importance to the GBI. A look at the 3rd quarter 1989 is offered based upon preliminary data and professional intuition.

Energy

The Energy Subsector declined 2.5 percent from the 2nd quarter of 1988 and was off 2.1 percent from the 2nd quarter of 1987. This quarter's decline represents the 4th consecutive quarterly decline for this subsector (when compared to the same quarter previous year). Again, every indicator posted a decline from the previous year. Only the gross production (GP) tax collections are showing any strength, and that is due to the volume of oil and gas being sold, not the price for which it's being sold. In current dollar terms, GP tax collections actually rose from the 2nd quarter of last year (4.6 percent). Unfortunately, with inflation running at a 5.2 percent clip in the 2nd quarter,

that gain was wiped out. Once again, natural gas tax collections led the way, hitting almost 61 percent of the total in the 2nd quarter of this year, up from 59.4 percent in the 2nd quarter of 1988.

As mentioned in last quarter's report, the energy sector shows little promise of picking up for the remainder of the year, especially if one looks at the two leading energy indicators within the index: intent-to-drill permits (ITD) and seismic crew activity. Both indicators posted sizeable declines in the 2nd quarter (down 46.4 percent and 34.8 percent, respectively), signifying at least another six months of negative production news from the energy patch. With active rotary rigs off almost 13 percent from last year, decreased production levels are a real possibility for the remainder of the year. Production levels for oil through the first six months of the year are off almost 10 percent. With active rotary rigs hitting a decade low monthly average of 91 in June, one can't expect any improvement for that month. The energy patch and the state's general fund are suffering from that age old problem of poor market prices. GP tax collections will improve with higher prices, which, in turn, will most likely result in increased production, which, in turn, . . .

The reason for the weak production levels in Oklahoma are directly related to the stronger than "quotaed" levels within OPEC. At the start of the 2nd quarter, OPEC production was estimated to be just under their quota of 19.5 million barrels per day (mb/d). As the summer months drew closer (and demand for gasoline grew stronger), the price of North Sea Brent and West Texas Intermediate surged near the \$23.00 mark. This naturally, sent OPEC production quotas out the window. By the end of the quarter, OPEC production levels exceeded the 21 mb/d level and crude oil prices began to fall. Despite heavy demands for refined crude oil products (primarily gasoline), overall worldwide demand was not quite as strong as expected because of the recent weakness in the manufacturing sector of the national economy. With factory capacity utilization rates and durable goods orders declining, demands from the energy-intensive manufacturing sector had slowed. That trend has carried into the 3rd quarter as well, signifying a promising 3rd quarter for the consumer, but, again, not for the producer; especially the Oklahoma producer.

More of the same is expected in the 3rd quarter. Demand for OPEC oil has been estimated to be 20.9 mb/d for the

second half of the year; OPEC oil production is forecasted to come in above that level. With oil stocks already high and demand likely to slow, downward pressure on prices, therefore production, can be expected. If that scenario plays out at the international level, expect Oklahoma to suffer along too. Rig counts for July and August hover in the 105-115 range, hardly a number that conjures up thoughts of increased exploration or production for the rest of this year and into 1990. The only positive findings so far are buried in the ITD permits. They show that, despite weakness, the percentage that "new wells" make of the total is rising each month. But, a higher percentage of a declining number is still a small number. Oh well, I tried!

The natural gas industry suffered through a poor pricing environment in the 2nd quarter, with the average price rate of natural gas sold in the state sitting around \$1.40. The 3rd quarter brought good news to the industry: President Bush signed the natural gas decontrol legislation for which all of the producing states had pushed so hard. Unfortunately, as we approach the end of the 3rd quarter, the good news from decontrol has not spread to the spot and contracted prices for the fuel. Spot prices for August delivery of natural gas were flat, and declines were expected for both September and October, barring any unusually cold weather. If that occurs, expect to see an increase in the number of well "shut-ins" for the 3rd quarter. That, of course, does not bode well for either gas exploration or the tax collections off the sale of natural gas. Despite the activity by ARCO and several other majors in the Arbuckle area (southeast Oklahoma), the short-term forecast for natural gas remains weak.

The long-term forecast is another story. According to Donald Dufresne, a natural gas analyst for Merrill Lynch, "the outlook for both consumption and pricing in the 1990s is excellent." Most energy people would be happy with one or the other, so both sound great. Merrill Lynch, a firm that works with billions of dollars of investors' capital,

is seeing fewer and fewer investors scared away from the purported "gas bubble" that has hung on so persistently. But stronger demand, the shrinkage of excess capacity, and firmer prices are leading investment firms like Merrill Lynch to recommend natural gas to its customer base . . . as a long-term investment.

While consumption of natural gas has risen 11 percent over the past two years, the deliverability of that commodity has, according to Merrill Lynch, actually declined 8 percent. Furthermore, President Bush's clean-air legislation is likely to result in an even stronger push away from coal-fired to gas-driven electrical plants in the U.S. during the decade of the 1990s. Finally, as we have witnessed very dramatically in our state, co-generation is no longer a concept, but a reality within the business community. With one plant constructed, another under construction, and several others being negotiated, gas-powered electricity in the 1990s is a given. With natural gas as this state's "energy leader" already, look for continued growth in natural gas investment, drilling, and tax collections for years to come. Most of the take-or-pay contracts of the early 1980s have been worked out and minimal damage has resulted from the Canadians' entry into the domestic market. As Richard Bogert, President of Bogert Oil Co., recently stated: "For companies holding large reserves of natural gas, companies that understand the dynamics of finding and producing this resource, one fact is clearly evident: the upside pricing potential means the stage is set for potentially dynamic revenues." Strong words from the head of a once dominant oil company!

Manufacturing

The Manufacturing Subsector posted a scant 0.4 percent gain from last year, the weakest year-over-year quarterly gain since the 3rd quarter of 1987. Like factory trends at the national level, growth in the manufacturing sector has stalled. Overall manufacturing employment in Oklahoma and its two

metropolitan areas has slowed considerably from last year's level, eeking out 1.2 percent to 1.7 percent growth rates. The Tulsa MSA, already dominant among metro areas in manufacturing, should continue to grow given recent announcements, more than offsetting weaknesses found statewide. As has been reported in the space in the past, Oklahoma City has never been, either numerically or as a percentage of total Wage & Salary Employment, a "manufacturing center." Tulsa, on the other hand, has been the dominant manufacturing metro, although historically it has been a "pump, pipe, valve, and rig" manufacturing center, highly dependent upon the energy industry. In addition to weaknesses on the employment side, weekly hours worked in manufacturing have begun to rise again, signifying that local manufacturers are reluctant to hire. Paying for overtime is, for the short-term, more cost-effective than carrying additional full-time employment, especially with the U.S. dollar on the rise.

The Department of Commerce's report on New & Expanded Manufacturers and Processors in the state indicates that manufacturing activity has and will (most likely) slow. Through the 1st six months of 1989, the announced number of firms, the amount of investment (\$), and the total number of jobs have fallen below 1988 levels. It is important to note that the 1st six months of 1988 was one of the strongest periods of the decade. But what this data really tells us is what, if completed, is likely to happen 6 to 24 months down the line. With 82 firms, expected to employ 5,100 new employees, and representing almost \$315 million in new investment, the future is not bleak. But with the American Airlines expansion in Tulsa representing about 30 percent of the expected new job growth, many areas of the state will not benefit from these announcements. While the oil industry in this state and in Tulsa, in particular, is far from dead, the recent expansions in Tulsa in the area of aviation suggest that Tulsa might be considered the

"aviation," not "oil," capital of the world. If the announcements are realized, the futuristic concept of an "aviation triangle" (Wichita-Tulsa-Oklahoma City) may become reality.

The slowdown locally is not surprising, considering trends at the national level. The trade weighted value of the dollar escalated sharply in the 2nd quarter, continuing a pattern started in the 4th quarter of 1988. Industrial production went flat in the 2nd quarter and, after years of continuous growth, capacity utilization continued to fall. The latter was, in a way, positive in that the decline reduced fears of renewed inflation. We must remind ourselves constantly that the goal of the Fed is to keep inflation under control (0-2 percent ideally).

But the prospects for a strong 2nd half in the area of manufacturing revolves around movements in the dollar and capital spending. Currently, the dollar is gaining strength and capital spending isn't growing where it is needed if we are to continue the three year growth in manufacturing employment and output. A stronger dollar makes U.S.-made products less competitive and the high interest rate environment over the past 18 months has discouraged many from investing as heavily in new plant and equipment. While interest rates have come down slightly, the investment expenditures in manufacturing sector is expected to increase a paltry 3.6 percent (real terms) this year, well below the 12.8 percent growth seen last year. Not surprising, factory, durable, and machine tool orders all declined in July, following several months of weakness.

As has been mentioned consistently in this space, continued investment in new technology is absolutely critical to maintaining, regaining, and securing international market share. The high dollar of the early 1980s devastated many of our country's basic and manufacturing industries. But, for those that have survived, costs have been reduced, break even points have been lowered, and, as a whole, many are among the most efficient and lowest-cost producers in the world. While

keeping costs, in particular labor costs, under control is important, quality is the key. In fact, quality has replaced productivity as the key component in international manufacturing plants. In reality, they are inseparable and both require investment, either in physical terms (equipment, software, etc.) or human terms (educable, trainable workforce). We in Oklahoma are well aware that the future of our manufacturing base is tied directly to the quality of our educational system (from pre-school to vo-tech). While lower interest rates and a weak dollar will help, the Germans and Japanese have shown that quality, not the value of their mark or yen, is what sells the products they produce. Mitsubishi television sets and Mercedes Benz automobiles are not inexpensive, but they are quality-built and consistently high sellers.

Construction

The Construction Subsector of the Oklahoma economy fell 4.2 percent from the 2nd quarter of 1988, despite statewide improvements in residential and nonbuilding activity this past quarter. Residential activity (new permit) was up in the state (28.9 percent) and in both metros (41.4 percent and 27.1 percent, Oklahoma City and Tulsa) from 2nd quarter 1988. Again, percentage changes can be misleading, especially when working from such a small base. With very little new residential construction occurring over the past three years, one month within a quarter can distort the comparisons up or down. When one looks at the level of new residential activity today versus just four years ago (1985), the percentage changes turn dramatically negative, ranging from a -28.3 percent in Tulsa to a -51.1 percent in Oklahoma City. And for those of you who are unfamiliar with the real estate market in Oklahoma, 1985 wasn't even our peak year for new residential construction . . . 1983 was! EVERYTHING IS RELATIVE.

Year-to-date home sales (volume) are also up in both metros; unfortunately, the average sales price of the homes

sold is moving in the opposite direction. While supply as measured by the Multilist is declining, Supply/Demand Imbalance within the residential market will continue as long as new permit activity exceeds the demand for new and used units. With new residential permit activity up in both July and August in the Oklahoma City metro, look for prices to remain depressed.

As mentioned before, the nonbuilding portion of the Construction Subsector posted an almost 50 percent increase over last year's level, thanks primarily to interstate and state roadway improvements and a sales tax issue project to improve local infrastructure. With the sale of over \$550 million in turnpike bonds, Governor Bellmon is publicly pronouncing a 10,000-11,000 construction employment increase over the next 2+ years, which means new nonbuilding construction contracts will continue to escalate. Unfortunately, the nonresidential side of the construction ledger remains in "deep yogurt." Office vacancy rates still are high, ranging from 27-30 percent, depending upon the surveyor and criteria. The office market, while depressed statewide, seems to be faring a little better in Tulsa than in Oklahoma City. The reported net absorption numbers are higher in Tulsa and there has been a recent clamoring for new "Class A" office space. While both metros could probably use more, the fundamental health of Tulsa's economy (both current and projected) supports those desires much better.

While there are still some hot spots nationwide, most areas are much weaker in terms of new residential construction and home sales. The decline in interest rates (especially mortgage) since May helped push home sales up in June and July. But mortgage rates, which hit a two year low in July, began a slight ascent again in August, throwing cold water on any talk of a revival. In fact, the National Association of Realtors have forecasted a slight decline in sales nationwide this year. As the sales weaken and rates remain stubbornly high, it comes as no surprise that housing construction data for the

2nd quarter was off as well — 8 percent according to F.W. Dodge Group. Their data showed that the declines were not a result of weakness in the "oil patch" or "real estate ravaged" Southwest, but in "recent hot beds" of construction activity. Of the top ten most active metropolitan areas in the country (dwelling units started), seven posted declines from the 2nd quarter of 1988. The top four areas (Riverside-San Bernardino, Washington D.C., Los Angeles-Long Beach, and Atlanta) had declines ranging from 6-34 percent. Because of those declines, the 2nd quarter construction rate was the lowest in more than six years. I guess "what goes around, comes around!"

The prospects for new residential and nonresidential construction for the state remain bleak. The market is working. Despite a recent rise in new building permit activity, new apartment and office construction (the two weakest markets) are virtually nonexistent. We can only hope that trend continues. I maintain that the only prudent construction policy within the state of Oklahoma in the residential and nonresidential markets is one of "purchase and refurbish." Real demand (new business and household growth) is still too weak to support new construction, even if the units/space are preleased or presold. Internal "churn" does very little for the overall economy, although real estate brokers will benefit. Net absorption is most likely to take place when the existing infrastructure is well maintained and upgraded. The metros need to be focusing their efforts on office-intensive industries (such as financial, consulting, and professional services) to reduce vacancy rates. Being the most affordable residential or nonresidential market is attractive, but to whom? A \$56,000 house and \$14/ft Class A office space is a great selling tool, but only if the potential purchaser has a job. We have enough foreclosed property already!

Consumer Demand

The Consumer Demand Subsector, subject to the 5+ percent national in-

flation rate, posted a scant 2.1 percent decline in the 2nd quarter. While sales tax collections are moving in a positive direction statewide, both metros suffered through 6 percent quarterly declines in overall retail trade from the 2nd quarter 1988. While the Apparel group remains somewhat weak, general merchandise tax collections are growing, even in constant dollar terms. The biggest surprise with the 2nd quarter numbers was that, despite the number of large, one-time events taking place in the Oklahoma City metropolitan area, sales tax collections rose only modestly (2.1 percent). The sales tax collection figures for the state and both metros in July were up, thanks in part to the \$50 million + Olympic Festival held in late July. Given the success of the National Conference of State Legislatures, sales tax collections in at least Tulsa should likewise be positive in the 3rd quarter. The first indication of that showed up in the "back-to-school" sales for Tulsa, where TeleCheck Southwest reported a 12.9 percent increase in retail activity for Tulsa. The Oklahoma City metro, where employment trends have been weak over the past 4-5 months, posted a 7.2 percent decline.

The brightest news (editorial comment) concerning the consumer side of the economy was the long-awaited news that we, in Oklahoma, aren't in fact subject to the inflationary trends witnessed nationwide. The Center for Economic and Management Research, through the Oklahoma Department of Commerce, released a report that essentially said what most close to the subject felt all along: it is less expensive to live and work in Oklahoma. The cost of living index for the state, based on a U.S. average of 100 and a starting point of 1982, shows that we rose to a level of 105.5 in 1982 and currently stand at 94.2, almost 6 percent below the national average. The index covers seven separate communities in Oklahoma. For businesses that only remembered the inflated "oil boom" days of the early 1980s, this study demonstrates both the dramatic declines in cost of living and the cost competitive position each resident/

citizen enjoys relative to his/her regional and national counterparts. Now when we say "it costs less to live in Oklahoma," we can prove it. The economic development potential of this study is strong and the results of this research confirm that the inflation-adjusted sales data used in the GBI should be adjusted upwards. In essence, the dollar does go further in Oklahoma.

With the national CPI running at a 5 percent clip through the seven months of 1989, fears of "stagflation" returning to the market anytime soon have been abating. In fact, nearly every "forecasting expert" has reduced their projections for inflation for both 1989 and 1990. The hypothesis (by Dr. Milton Friedman) presented last quarter may be valid. The change in the quantity of money remains weak, with no signs of renewed growth, therefore, the rate of inflation should follow suit. Only time will tell, but based upon consumer, producer, and wholesale price index movements, inflation should continue to weaken. The primary items to watch are 3rd and 4th quarter energy prices (especially since we're importing over 50 percent of our petroleum products) and food prices. With OPEC still over-producing and major agricultural commodity prices falling, the 2nd half of this year should be a good one for the consumer. Based upon retail and auto sales in July and August, both nationally and in Oklahoma, such sentiment appears accurate.

The July and August consumer confidence surveys (Conference Board) remain strong, indicating that the consumer still intends to spend. At the same time, the consumer is saving, at almost double the rate he did just two years ago. The baby boomers, representing half the adult population, are causing the transformation. As Edward Yardeni, Prudential Bache economist, recently wrote: "the yuppies are borrowers and the couch potatoes are savers." The baby boomers are turning into couch potatoes and, because of their propensity to save, Dr. Yardeni expects to see a 10 percent savings rate by 1993. Renewed savings plus expected

rapid productivity gains will result in sub-5 percent inflation rates over the same period. Keeping inflation checked means greater purchasing power potential. Greater purchasing power means stronger consumer spending. In all, "the level of consumer confidence is substantially above that which generally signals a potential recession."

Agriculture

The Agricultural Subsector of the GBI remains the strongest element, expanding 3.8 percent over last year's levels. While weaker than it has been for some time, overall agricultural markets remain healthy. As was the case in the 1st quarter, wheat prices were up (28 percent) and beef prices were down (-2.8 percent). Fortunately, the strength of Oklahoma's wheat industry offset the slight declines in beef prices, allowing for the 3.8 percent growth for the quarter.

Wheat prices continue to be strong, although they, too, are beginning to plateau. Prices, which began the year at \$3.97/bushel, rose to \$4.11/bushel and averaged out at \$3.82 for July. While down from earlier this year, the current price is still 41 cents higher than last July's level. Because of record rains in June, the wheat harvest was late, but yielded higher prices. Unfortunately, the USDA estimated that growers in Oklahoma (the nation's #2 winter wheat state) harvested 5.7 million acres this year, with an average yield per acre of 27 bushels. That is well below last year's level of 36, but combined with the higher prices, helped offset the declines in row crops due to the drought.

What a difference a few months make. The two year drought is over for Oklahoma farmers and ranchers. With almost a third of the calendar year left, we have already exceeded average annual rainfall amounts! Almost 15 percent of the next year's crop has been planted, soil moisture conditions are excellent, and the government is recommending a 5 percent base acreage increase to all wheat farmers. Poorer 1988 production, coupled with the

heavily subsidized government wheat export program, brought inventories down considerably. So, the good news is that soil and weather conditions are excellent for planting and the prospects are equally bright for next year's crop yield. In fact, a recent forecast by a veteran agricultural economist (John Schnittker) points to a 1990 wheat harvest that could reach a six-year high of 2.5 billion bushels. The Agricultural Department forecasts a 2.1 billion bushel crop, up 14 percent from 1988. Either way, wheat production is going to rise. The bad news is that prices will, if everything goes smoothly on the production side, decline from their already weakening levels. Even if wheat prices do decline, forecasts of both yield and prices for row crops are strong, more than offsetting any weakness that might occur in the wheat sector. Overall, Mother Nature has demonstrated her cyclical behavior, this time her good side!

After posting consecutively quarterly price declines (inflation-adjusted), beef prices are poised to take off again. My most recent quarterly reports have mentioned the historically low herd size in this country, bringing existing and potential supply down considerably. The midyear cattle reported an estimated 108.6 million head (cattle and calves), virtually unchanged from last year. However, with the heavy amounts of rain, pasture conditions are excellent. The number of beef heifers, held out of the feeder cattle market for herd building, is up. Prospects, therefore, are good that herd size should start to rebound, but not so much as to push prices down significantly. Barring any strong negative reaction on the part of the consumer over high beef prices, the beef industry should finish the year on a positive note. In fact, the Agricultural Department is forecasting a 2-3 percent increase in the output of red meat and poultry for 1990. With the continued expansion of meat exports, the increase in output should not negatively impact the overall price increase forecasts for beef. Overall, we should see the Agricultural Subsector continue its positive impact on the GBI

for at least the next two quarters.

General

The General Subsector posted another quarterly gain from last year, up a seasonally-adjusted 2 percent from the 2nd quarter of 1988. Perhaps a truer indication of how far this Subsector has come, however, is the fact that it has risen 14.4 percent above 2nd quarter 1987 levels, the largest two year jump of any of the Subsectors. Of the six variables used in this Subsector, four of them moved positively. Those were: Wage & Salary Employment (+0.8 percent), Total Personal Income (+1.2 percent), the Unemployment Rate (down to 5.7 percent from 6.7 percent), and Services Employment (+1.2 percent). Of the two decliners—Bankruptcies and the Bank Stock Index (BSI)—only one was off significantly: the BSI (-20.8 percent). Bankruptcies posted a rare increase of 0.6 percent, hopefully just a quarterly aberration. Overall, this Subsector is finally providing some much needed strength to an index that continues to struggle along the bottom. The news of employment and income growth is significant, for additional income should help boost retail activity this fall and winter.

The 2nd quarter started with interest rates, the U.S. dollar, and stocks still climbing, while bonds were in a slump. Despite the news that the GNP expanded at a 5.5 percent clip, the April survey of the "50 top economists" from the Blue Chip Economic Indicators showed over 50 percent of the panel expected a recession by late 1989-early 1990. But then economists have forecasted nine of the last two recessions, so . . . ! The quarter ended with bonds moving strongly upward, while interest rates, the dollar, and stocks either flat or declining. But there was one constant: a prominent economic forecaster (John Mueller) wrote an article for the *Wall Street Journal* entitled "Recession's Coming — Will We Learn." His contention, based on the decline in the World Dollar Base, is that "the U.S. economy will enter a recession within six months." The date of the article

was June 29, 1989.

By the end of July, the 1st quarter GNP was revised downward to 3.7 percent, the 2nd quarter GNP was estimated to be 1.7 percent (the weakest in three years), and it appeared that the "recession-forecasting economists" were going to be right! Fortunately, it can probably be demonstrated (intuitively if not statistically) that forecasts from economists are best described as an "inverse indicator" — whatever they say will happen almost certainly won't! As we end September, the 2nd quarter GNP is now estimated at 2.5 percent! While the national economy is still struggling, the international economy continues to plug along at a greater rate than ours. With a "nonsynchronous expansion" going on internationally (i.e. Japan and West Germany growing at double digit rates while other economies like ours soften), we continue to find markets for our products while our appetite for imports continues to weaken. The trade deficit, when viewed from a moving average perspective, continues to show a downward trend, and both the national and global stock markets continue to move upward.

Perhaps the least known leading economic indicator — the conclusions from the Business Cycle Dating Committee — does not suggest a recession at all. The Committee, made up of seven business cycle experts, sets the historical record on whether the economy is in a recession. They have no plans to meet and, in fact, haven't met in over 6 years. As one of the Committee members recently remarked: "Not every hiccup in the economy is a recession. A downturn would have to be widespread and sharp before the Committee met." The key indicators they watch: GNP, industrial production, and employment. As we close the end of the 3rd quarter, GNP was revised upward to 2.5 percent, industrial production rose for the second consecutive month in August (+2.8 percent), and Wage & Salary Employment expanded another 110,000 jobs, a number that would have been doubled if not for the 108,000 workers removed

from payroll counts because of strikes.

The economy continues to climb doggedly upward and as one economic analyst recently wrote, "the economy is in a phase of disinflationary growth." That combination (rising growth and declining inflation) normally occurs during periods of economic recoveries. This "economic forecaster" will stick with his forecast made last year at this time — no recession through 1990. The sensitive economic indicators all point to a strengthening economy. A "soft landing followed by a slow takeoff" is as concise a description of where the national economy has been and is headed. While a "boom" is nowhere in sight, slow growth is better than no growth. We in Oklahoma, ever more dependent upon the national and international economies, must hope for and contribute to a continued strengthening of the national economy. With inflation abating and employment, savings rates, personal income, and capital spending rising, the risk of a recession is quite remote. Our biggest concern now is whether economists will now forecast strong growth. If that occurs, get liquid!

Financial

Hopefully, to no one's surprise, this Subsector posted another quarterly decline, off a whopping 10.1 percent from last year's levels. I closed last quarter's Financial Subsector analysis with the statement "look for the banking industry to lead the way," addressing which of the two (thrifts or banks) would reach positive net worth first. This quarter's indicators reflect that trend, with S&L loan closings, commitments, and net deposits all falling from last year's levels. Total net income of Oklahoma's two largest publicly-traded banks, however, rose an inflation-adjusted 27 percent from last year and over 111 percent from two years ago. Obviously, the declines within the thrift set of indicators more than offset the positive movement of the banking indicator.

Nationally, the 2nd quarter was one of uncertainty for the thrift industry.

There were some givens. The industry was in trouble, in fact, deep trouble. The uncertainty came from not knowing how deep and how it was going to be rectified. The 3rd quarter delivered that news. Based upon 1st quarter data, over 13 percent of the nation's 2,959 S&Ls were insolvent (liabilities exceeding their assets). Another 13 percent had net worths of less than 3 percent of their assets. The biggest surprise was that Oklahoma was not even ranked in the top ten in terms of S&L insolvencies! Oklahoma did, however, rank 39th in terms of earnings (-\$31.5 million) and sixth in terms of repossessed assets (\$588.2 million).

On August 9, 1989, President Bush signed the "S&L Bailout" bill (formally called the Financial Institution Reform, Recovery, and Enforcement Act of 1989!) into law, authorizing \$50 billion over the next 2+ years to remove the sickest S&Ls from the system. While the total cost is now estimated to run over \$160 billion, most analysts close to the system feel certain that the eventual cost will be 2-3 times that amount. Despite the costs, the legislation should be very positive for healthy thrifts, according to Alex Sheshunoff, thrift consultant. "It brings stability and respectability back to the industry, it improves earnings because rational competitors will be paying rational deposit rates and, most importantly, it will end up maximizing shareholder value as a result of healthy banks buying healthy thrifts." Sounds impressive; let's hope reality matches theory!

The 2nd quarter results for total net income among the 38 thrifts still operating in this state explained the performance of the thrift indicators in this Subsector. Combined net income in the 2nd quarter was -\$89.7 million, almost triple the 1st quarter loss! Sixteen of the 38 institutions posted negative net incomes, with two of them combining for a net income loss of \$80.4 million alone. As a state, the net worth-to-asset ratio stands at 2.9 percent, not healthy but better than last year's level. In fact, in the 2nd quarter of last year, combined Oklahoma thrifts had a net worth of -\$269.7

million on almost the same amount of assets (\$10.3 billion). We're constantly reminded of the bad within the industry, primarily because of a few institutions, but remember that over 60 percent of the institutions posted positive net income for the quarter (up from 45 percent last quarter and 24 percent from last year) and 84 percent posted positive net worth (up 63 percent from last year).

The banking industry continues to show improvement, despite the August failure of our 100th bank since the failure of Penn Square in July 1982. Fortunately, the bank failure in Yale was only the 8th this year and the size of that bank (in terms of assets), like most of the recent failures, was small. State banks, which now total less than 450, posted a net income of \$5.14 million in 1988, and made more money in the 1st quarter of 1989 (\$24.7 million) than they did in each of the last four years. The 2nd quarter numbers were even more positive, with state banks having a combined net income of \$28 million. Through the first six months, Oklahoma bank profits are almost five times the 1988 six month level. Bank profits for Oklahoma County and Tulsa County-based institutions continue to grow, with Oklahoma County's largest commercial banks posting their third consecutive

quarterly improvement through June 30, 1989. While the overall profit picture is positive, it is so at the expense of the declining assets, deposits, and loans. Like the thrift industry, all is improving yet not well, comparatively speaking. Look for a greater percentage of banks and thrifts to make it into the "positive net income" column, but also look for the number of institutions and the total amount of assets held by those institutions to fall. Much has been written down or off; much more is on the way.

Conclusion

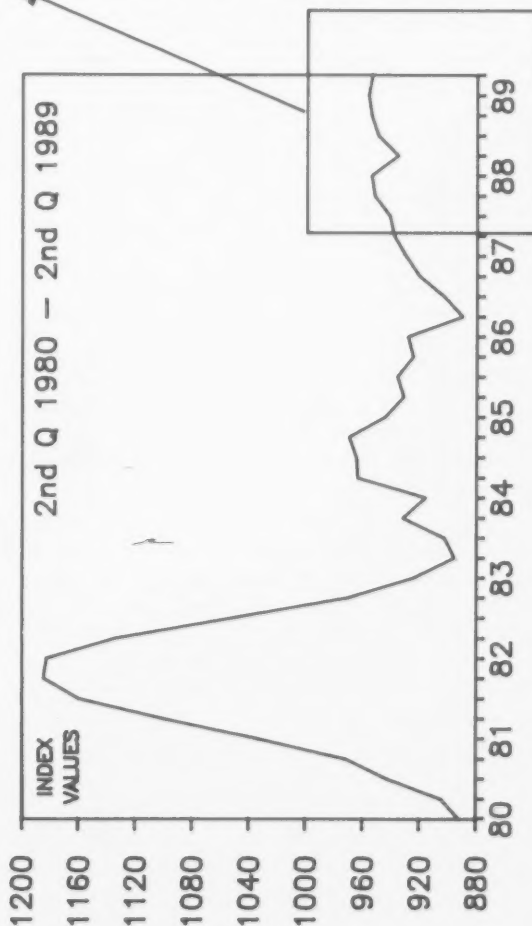
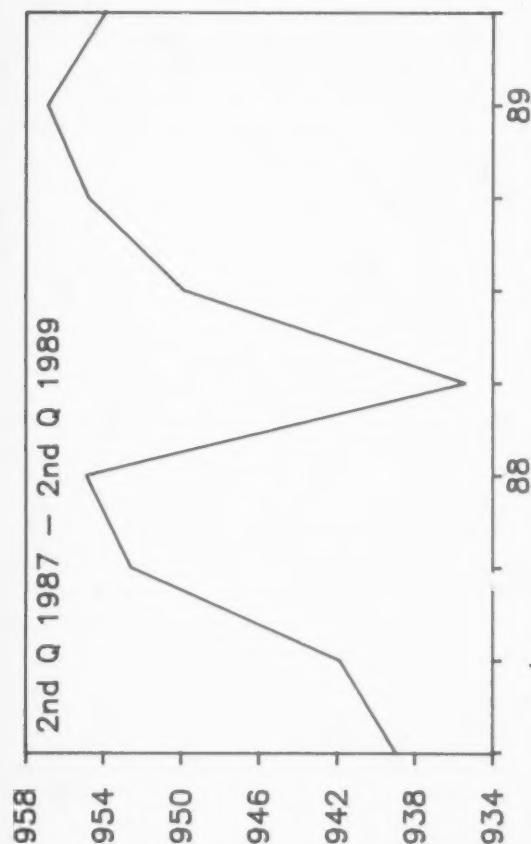
The economy has weakened in the first half of the year. The graphs on the following page reflect that weakness, especially in the Oklahoma City metro area (Figure 1). Total Wage & Salary Employment has begun to slow statewide and has actually turned downward in Oklahoma City. Tulsa, on the other hand, has "taken off," due in large part to the continued strength of the aviation sector. The employment slowdown is disheartening, but not that unexpected if one accepts the premise that Oklahoma is moving more cyclically with the national economy. As demonstrated in Figure 2, the GNP's rate of growth has been slowing since 1987 and the forecast,

even from the Administration, is for continued slow growth. In fact, 2nd quarter GNP grew at a 2.5 percent clip, down from the preliminary 2.7 percent rate and below 1st quarter's level of 3.7 percent. The "soft-landing" techniques employed by the Fed have apparently been successful, squelching any projections for an immediate recession. In fact, the National Association of Business Economists recently released their forecast that the U.S. expansion will last at least until the 3rd quarter of 1991, which would set a new record for economic growth.

Unfortunately, with slower growth at the national level, even slower growth can be expected locally. With our economic base still in the "diversifying phase" of development, we should have no hope for growth in excess of the nation's, and preliminary 3rd quarter employment data seems to support that contention. We seem to be "trolling along the bottom," with no evidence of a identifiable reescalation in sight. Perspective is most important in a sluggish economy, so let us remember that "slow growth is better than no growth."

Craig Knutson is Staff Economist for Southwestern Bell Telephone Company.

OKLAHOMA GENERAL BUSINESS INDEX



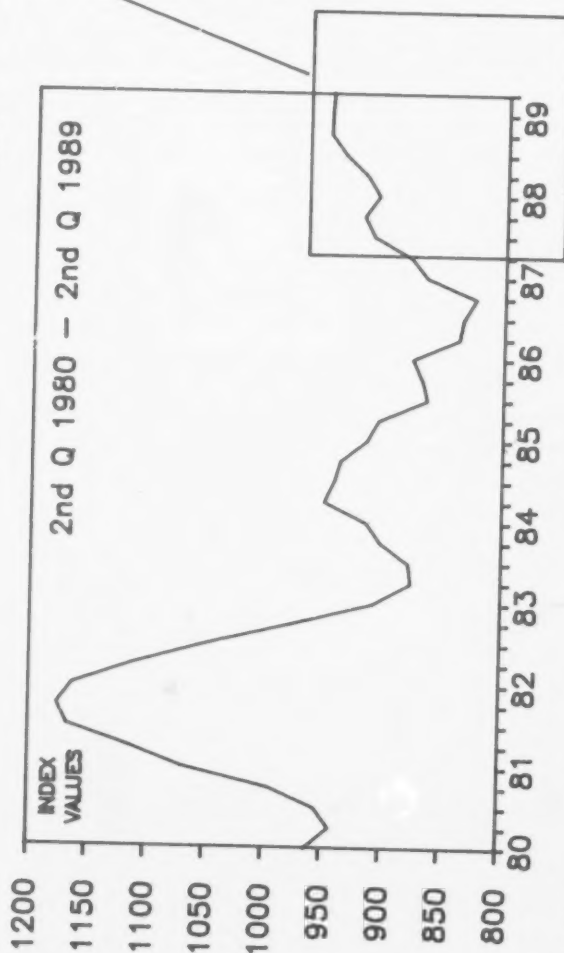
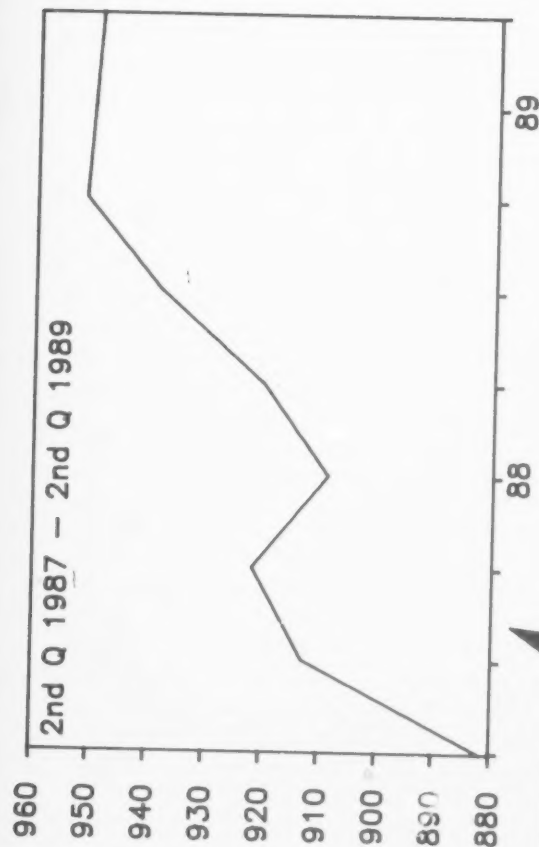
- 1980 - 1989 GBI AVERAGE = 969.7
- 2ND Q 1987 - 2ND Q 1989 AVERAGE = 948.8
- PER CAPITA INCOME IN OKLAHOMA ROSE BY 5.7% IN 1988, JUST UNDER THE NATION'S 6.6% GROWTH
- THE FIVE STATE-OWNED VACATION RESORTS REPORTED AN OVERALL OPERATING PROFIT FOR 1988, A FIRST

2Q 1989	1Q 1989	2Q 1988	2Q 1987
AVERAGE	AVERAGE	AVERAGE	AVERAGE
VALUE	VALUE	VALUE	VALUE
953.9	958.9	935.4	939
%	%	%	%
CHANGE	CHANGE	CHANGE	CHANGE
-0.3	-0.3	2	1.6

¹ COMPARED TO CURRENT QUARTER

SOURCE: SMWT ECONOMIC DEVELOPMENT DISTRICT/CEDAR

OKLAHOMA CITY GENERAL BUSINESS INDEX



2Q 1989	1Q 1989	2Q 1988	2Q 1987
AVERAGE VALUE	AVERAGE VALUE	AVERAGE VALUE	AVERAGE VALUE
948.1	950.2	920.2	881
% CHANGE	% CHANGE	% CHANGE	% CHANGE
-1	-1	3.1	7.7

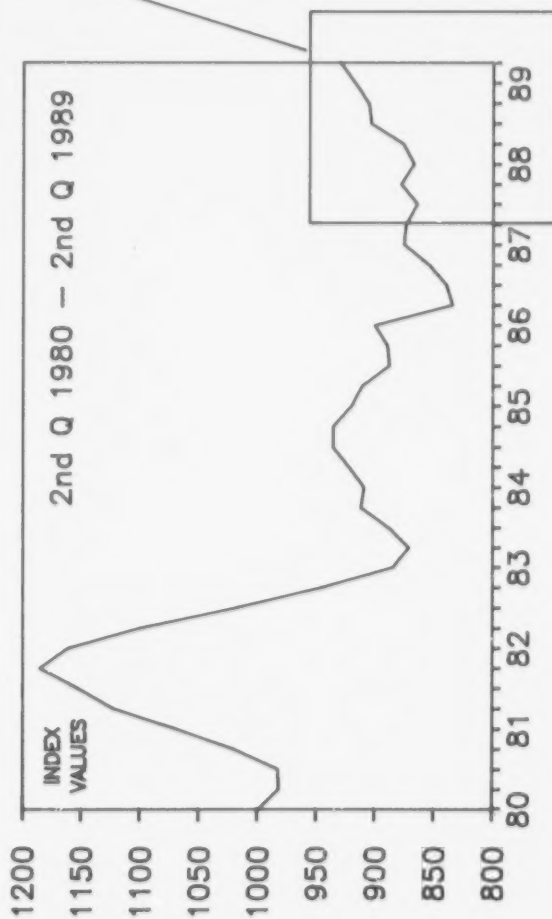
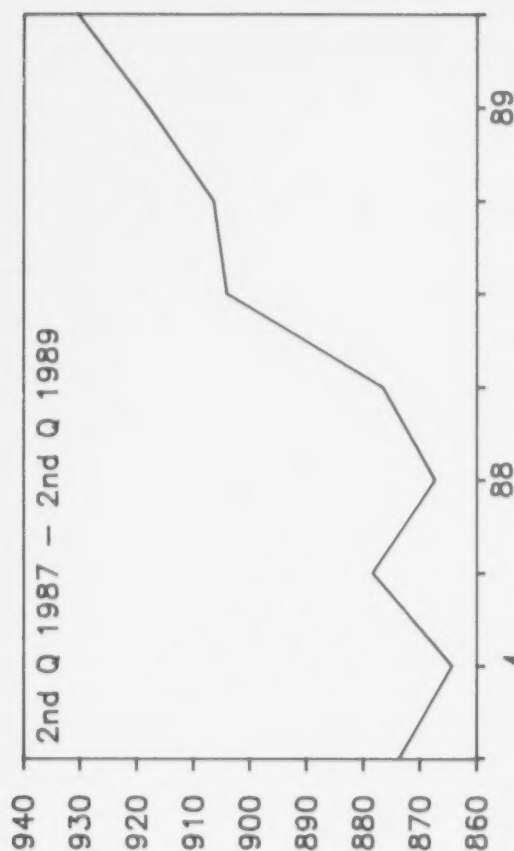
¹ COMPARED TO CURRENT QUARTER

- 1980 - 1989 GBI AVERAGE = 950.9
- 2ND Q 1987 - 2ND Q 1989 AVERAGE = 926.1
- IMPLEMENTATION OF THE FEDERAL AVIATION ADMINISTRATION'S \$23b NATIONAL AIRSPACE PLAN MEANS CONTINUING LONG-TERM GROWTH IN OKC AVIATION SECTOR INVESTMENT AND GROWTH

- THE FEDERAL RESERVE BANK OF DALLAS REPORTS OKC INDUSTRIAL VACANCY RATE AS THE LOWEST AMONG MAJOR METROPOLITAN AREAS IN THE SOUTHWEST AT 6%, THE NATIONAL AVERAGE

SOURCE: SWBT ECONOMIC DEVELOPMENT DISTRICT/CDJR

TULSA GENERAL BUSINESS INDEX



- 1980 - 1989 GBI AVERAGE = 945.6
- 2ND Q 1987 - 2ND Q 1989 AVERAGE = 891.1
- SURVEYS OF VISITORS AT THE CONVENTION OF STATE LEGISLATORS IN TULSA SHOW THEM OVERWHELMINGLY IMPRESSED WITH THE CITY -- SPREADING THE NEWS TO THE ENTIRE NATION AS THEY RETURN HOME
- EVEN WITH MAJOR RECENT CITY INVESTMENT IN STREET IMPROVEMENTS, TULSA'S PER CAPITA DEBT IS LESS THAN 40% OF THE NATIONAL MEDIAN, LEAVING ROOM FOR FUTURE INFRASTRUCTURE ENHANCEMENT

SOURCE: SWBT ECONOMIC DEVELOPMENT DISTRICT/CEDUR

2Q 1989	1Q 1989	2Q 1988	2Q 1987
AVERAGE	AVERAGE	AVERAGE	AVERAGE
VALUE	VALUE	VALUE	VALUE
930.5	917.9	876.7	873
%	%	%	%
CHANGE	CHANGE	CHANGE	CHANGE
1.4	1.4	6.1	6.6

¹ COMPARED TO CURRENT QUARTER

An Overview of State and Local Government Finance in Oklahoma

LARKIN WARNER

THE SERVICES PROVIDED AND regulations implemented by state and local governments in Oklahoma have a tremendous impact on economic activity. At an even more basic level, the state-local government sector accounts directly for a significant share of Oklahoma's overall employment and flows of spending. By the conclusion of the fiscal year ending June 30, 1990, (FY 90) the general expenditures of state and local government in Oklahoma will be around \$8 billion. In June, 1989, Oklahoma's state-local government sector employed 197,000 full-and part-time workers—17.2 percent of total nonfarm payroll employment.

The purpose of this overview of state and local government finance is to introduce some of the fundamentals of the structure and conduct of this important sector. The discussion is divided into three parts. First, the pattern of activity is summarized using expenditures and employment of government units directly providing services to the public. Second, revenues are analyzed with emphasis on the roles of taxes and intergovernmental shifts of funds. Third, the discussion focuses on state government alone and reviews the role of expenditures and appropriations to indicate changes in priorities and

finance issues likely to be the source of special pressures in the future.

Direct Governmental Activity

Oklahoma's system of state and local governments consisted of the following separate units in 1987:

State	1
County	77
Municipal	591
School district	636
Special district	498

In addition, there are at least 37 Indian tribal governments in Oklahoma with unique sovereign powers including the power to tax. Detailed federal statistical reports on governmental finances and employment do not include information on tribal governments.

FY87 is the latest year for which detailed data are available in a consolidated form for all units of government. During that year, direct general expenditures for all state-local governments in Oklahoma was \$7.2 billion (Table 1). This represents expenditures made directly by the unit of government purchasing an input or otherwise making payments directly to the public; excluded are intergovernmental

payments where one unit of government transfers funds to another. Also excluded are expenditures by utilities and insurance trusts (such as unemployment benefits and retirement).

State government is the dominant source of direct general expenditures—accounting for 45 percent of all state-local outlays. (As will be seen in the following section, state government also transfers a great deal of its funds to units of local governments.) Local school districts account for about one quarter of spending, with cities responsible for 20 percent and counties for about 7 percent. Although there are a great many separate special district governments, as a group they generate less than 2 percent of spending.

Table 1 shows the relative importance of direct general spending on various governmental functions. It describes the essential functional responsibility carried on by each type of government. Highlights of these functional responsibilities include the following:

- Half of all direct general spending by state government is for higher education (23.5 percent) and public welfare (25.8 percent).
- Counties specialize in the provision of road systems (27.5 percent) and

TABLE 1
General Expenditures in Oklahoma
Fiscal 1987

Expenditures/Type	Total	State	County	Municipal	School District	Special District
Total Expenditures (millions of dollars)	\$7,249	\$3,258	\$547	\$1,421	\$1,906	\$117
Percent by Type:						
Elementary and secondary education	26.3%	0.9%	0.4%	—	9.84%	—
Higher education	10.6	23.5	—	—	—	—
Other education	1.0	2.3	—	—	—	—
Public welfare	11.7	25.8	0.9	0.1	—	—
Health and hospitals	9.4	10.1	18.8	17.6	—	—
Highways and streets	9.1	12.1	27.5	8.0	—	—
Police and fire	4.5	1.1	5.5	18.1	—	—
Corrections	2.0	4.1	1.6	0.2	—	—
Natural resources, parks & recreation	3.2	3.6	2.6	7.0	—	1.7%
Housing & community development	1.9	0.2	0.1	2.0	—	86.3
Sewerage & sanitation	3.6	—	—	18.4	—	—
Governmental administration	5.0	5.0	17.0	7.7	—	—
Interest on general debt	6.2	5.8	17.0	8.9	1.6	12.0
Other	5.5	5.5	8.6	12.0	—	—
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: U.S. Bureau of the Census, *Government Finances in 1986-87*. Series GF-57-5. Washington, D.C.: U.S. Government Printing Office, 1986, p. 83.

health (18.8 percent—largely county health departments); counties spend a larger share on governmental administration (17.0 percent) than is the case with other types of government.

- Municipalities emphasize health and hospitals (17.6 percent), police and fire protection (18.1 percent) and sewerage and sanitation (18.4 percent).
- Local school districts are, of course, a single-function type of government.
- The bulk of the funds spent by special districts is related to housing and community development; other functions currently performed by these districts include fire protection and natural resource management and conservation.

Is Oklahoma's overall functional pattern significantly different from that of other states throughout the nation? Has Oklahoma's pattern of functional

allocation changed in any big ways in recent years? A tentative answer to both questions is "No." Table 2 shows the statistically available patterns of outlays of functions for all state-local governments for Oklahoma and the United States in FY77 and 87.

Although there is some variation in shares, Oklahoma's state-local government sector did about the same things with about the same relative emphases as it did a decade earlier, and remained quite similar in this respect to the average state. Throughout the nation there is lots of variation in the relative importance of state versus local governments in performing functions. There is also great variation in the relative importance of various tax and other revenue sources. However, overall relative expenditures are similar because the state-local sector has essentially a uniform set of responsibilities within the nation's system of federalism.

State and local government services are often labor-intensive. This is

especially true of educational services. Table 3 reports the allocation of full-time equivalent (FTE) employment for major types of government and includes a breakout of educational employment. In October, 1987, the total FTE employment of state and local government in Oklahoma was 171,000. Half of this employment was in education. In the midst of an overall weakening statewide employment picture in Oklahoma, 1982-88, the state-local government sector exhibited expansion. The Oklahoma Employment Security Commission reports 84,000 fewer nonfarm payroll jobs between 1982 and 1988, while state-local government employment grew 9,000.

The Role of Taxes, Other Revenues and Intergovernmental Fiscal Relations in Oklahoma

Taxes are the most politically prominent source of governmental revenue.

Raising the rate or expanding the legal base of a tax always generates public controversy. However, taxes are only one form of governmental revenue, and

informed discussion of tax policy in Oklahoma should start with an appreciation of the following fiscal features:

TABLE 2

General Expenditures in Oklahoma and the U.S.
Fiscal 1977 and 1987

Expenditures/Type	Oklahoma		U.S. State and Local Governments	
	1977	1987	1977	1987
Total Expenditures (millions of dollars)	\$2,937	\$7,249	\$273,002	\$653,608
Percent by Type:				
Elementary and secondary education	25.0%	26.3%	26.1%	24.0%
Higher education	12.8	10.6	9.6	9.2
Other education	2.1	1.0	1.9	1.5
Public welfare	12.3	11.7	12.7	12.3
Hospitals and health	8.3	9.4	8.3	8.7
Highways	10.6	9.1	8.5	8.0
Police and fire	4.4	4.5	5.4	5.4
Sewerage and sanitation	3.2	3.6	3.2	3.3
Interest on general debt	3.3	6.2	4.2	6.4
Other	18.0	17.6	20.1	21.2
Total	100.0	100.0	100.0	100.0

Source: U.S. Bureau of the Census. *Governmental Finances in 1986-87*, Series GF 77 No 5; *Government Finances in 1986-87*, Series GF-87-5. Washington, D.C.: U.S. Government Printing Office, 1978, and 1988.

TABLE 3

Employment in State and Local Government
in Oklahoma
1977, 1982 and 1986

Type of Employment	Number of Employees During October			Percent of Employees		
	1977	1982	1986	1977	1982	1986
Total full-time equivalent employment	140,041	168,398	173,248	100.0%	100.0%	100.0%
Education:	68,630	83,240	88,954	49.0	49.4	51.3
State higher education, instructional	6,250	6,799	7,109	4.5	4.0	4.1
State higher education, other	11,624	13,682	17,332	8.3	8.1	10.0
School district, instructional	36,211	42,257	44,593	25.8	25.1	25.7
School district, other	14,545	20,502	19,920	10.4	12.2	11.5
State government, non-higher education	31,748	41,857	39,993	22.7	24.9	23.1
County	13,893	13,661	13,452	9.9	8.1	7.8
Municipal	24,969	28,564	29,681	17.8	17.0	17.1
Special district	801	1,076	1,168	0.6	0.6	0.7

Source: U.S. Bureau of the Census. *Public Employment in 1977 (1982, 1986)*. Series GE 77-No. 1, GE82-No. 1. Washington, D.C.: U.S. Government Printing Office, 1978, 1983, 1987.

- Attention must be paid to other revenue sources as well as tax revenues.
- Tax policy must be viewed in the context federal, state, and local government fiscal relations.
- Intergovernmental revenues are an especially important source of government finance.

In FY87 (the latest year for which complete data are available), taxes accounted for only 53.8 percent of all general revenue received by state and local government in Oklahoma (Table 4). General revenue refers to all revenue except utility revenue and money flowing into insurance trust programs such as retirement and unemployment insurance. Table 4 treats all state and local government as a single unit; thus intergovernmental payments between state and local government units net out to zero.

Intergovernmental Revenues

Figures 1 and 2 illustrate how government is financed in Oklahoma at both state and local levels. Figure 1 treats local government as a single unit and includes intergovernmental revenue from the federal government. Details on counties, municipalities, and school districts are provided in Figure 2. In both figures, the arrows show intergovernmental payments (receipts). Both figures also show "own source" revenue which refers to all general revenue collected at the particular governmental level other than intergovernmental revenue.

Figures 1 and 2 emphasize several important characteristics of Oklahoma's governmental finance system.

- Large amounts of funds move from one level of government to another; on a gross flow basis, roughly one-third of all state and local government revenue in Oklahoma involves intergovernmental flows.
- The federal government is a much more important revenue source to state government than to local jurisdictions.

TABLE 4
General Revenue Sources for State and Local Government
Oklahoma
Fiscal 1987

Revenue Sources	Amount (millions of dollars)	Percent
Intergovernmental revenue from the federal government	\$1,277	17.2%
State and local taxes	3,987	53.8
Current charges:		
Education	374	5.1
Hospitals	411	5.6
Other current charges	418	5.6
Interest earnings	588	7.9
Miscellaneous	353	4.8
Total General Revenue	7,408	100.0

Source: U.S. Bureau of the Census. *Government Finances in 1986-87*. Series GF-87-5, Washington, D.C.: U.S. Government Printing Office, 1988, p. 83.

- Local governments as a group rely more heavily on intergovernmental revenue than does the state government.
- Among the types of local government, municipalities are by far the most fiscally self-reliant; the cities' self-reliance would be even more intense if utility revenue were included in the analysis. Even here, however, cities and towns benefit from state maintenance of state highways within their limits.
- There is substantial flow of funds from the state to the counties; the bulk of this is for the construction and maintenance of county roads. The state also provides implicit support for counties by funding district attorneys.
- School districts rely very heavily on the state for funding; intergovernmental revenue from the state is 60 percent greater than own-source revenue.

Trends in the state government's provision of intergovernmental revenue to local government are compared with U.S. trends in Table 5 for the period FY77-87. Key features include the following:

- Oklahoma's state government par-

ticipation in county finance declines during this period; so does that of the nation, but to a lesser extent.

- Nationwide, cities receive a great deal more revenue from the state level than is true for Oklahoma; the contrast is overstated because of states in which public welfare and elementary and secondary education functions are performed by city governments.
- Oklahoma's public schools rely more heavily on state funding than is the case nationally.
- During FY83-87, Oklahoma state government's share of school district general revenue fell from 64.4 percent to 58.9 percent; nationally intergovernmental revenue from the state rose slightly from 51.3 percent to 52.8 percent.

Oklahoma state government's declining relative share of school district finance after FY83 appears to be related to two factors. First, state tax revenues were more sensitive to the economic recession following the state's energy boom than was the local property tax. Second, the role of the property tax was enhanced further by state-level administration of increased minimum assessment ratios.

The Role of Taxes

Now that total governmental revenues are placed into the perspective of tax and non-tax sources and intergovernmental fiscal flows, it is relatively easy to identify the principal characteristics of Oklahoma's system of taxation. Table 6 shows the state's main taxes and their relative importance for state government, county government, municipalities, and school districts. Although many different taxes are used in Oklahoma, and although there is a myriad of statutory and regulatory detail applicable to tax administration, the fundamentals of the system are relatively easy to describe. The eight major tax types listed in Table 6 accounted for 88.6 percent of all state and local tax collections in FY87. Important features of the system include the following:

- State government uses a much more diverse set of taxes than local government; the sales tax and property tax are virtually the only tax sources available to local jurisdictions.
- The property tax dominates tax sources for counties and school districts; cities emphasize the sales tax and have only limited access to the property tax.
- The Oklahoma Constitution prohibits state-level use of the property tax.
- The general sales tax and the individual income tax account for half of all tax revenues collected by state government.
- The severance tax (primarily the gross production tax on crude oil and natural gas production) is the state's third most important tax source; however, at 14 percent of state tax revenues in FY87, this source has only half the relative importance of its 29 percent share in FY82.
- Taxes and intergovernmental revenues play widely varying relative roles for different types of government; in FY87, Oklahoma's schools received \$2.01 in

intergovernmental revenue for every \$1.00 tax revenue raised locally while municipalities received only 21¢.

The Fiscal Role of the Federal Government

Any discussion of state and/or local government revenues in Oklahoma eventually involves consideration of taxes paid to the federal government. This is usually also accompanied by questions about the extent to which Oklahoma tax dollars sent to Washington are offset by federal government outlays in Oklahoma. Table 7 reports estimates of federal taxes and outlays for Oklahoma during the fiscal year ending September 30, 1987 (the latest available data). Several conclusions are suggested with the caveat that the estimates in Table 7 are rather "soft."

- For every \$1 in state and local taxes, Oklahomans paid \$2.29 in federal taxes in FY87.
- Individual and corporate income taxes accounted for 56.3 percent of federal taxes paid by Oklahomans in FY87, but only 19.1 percent of state-local taxes.
- Federal outlays in Oklahoma appear to be roughly equal to federal taxes paid by Oklahomans.

Revenue from Borrowing

Over the years many capital projects and loans to government entities and individuals are financed through borrowing by state and local governments. This includes borrowing by trust authorities established with government as the beneficiary as well as debt backed with the full faith and credit of the issuing government unit. Thorough data on the total debt issued by Oklahoma's governments and trusts does not exist. The U.S. Bureau of the Census reported the following for Oklahoma as outstanding debt at the end of FY87 [Government Finances in 1986-87, GF-87-5, p. 36]:

FIGURE 1
Intergovernmental and Own-Source Revenue Flows
in Oklahoma, Fiscal 1987
(amounts in millions of dollars)

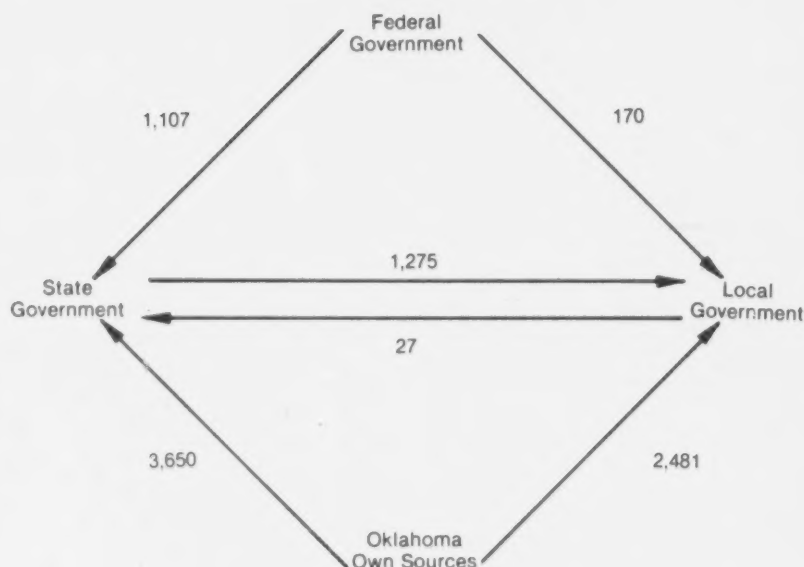
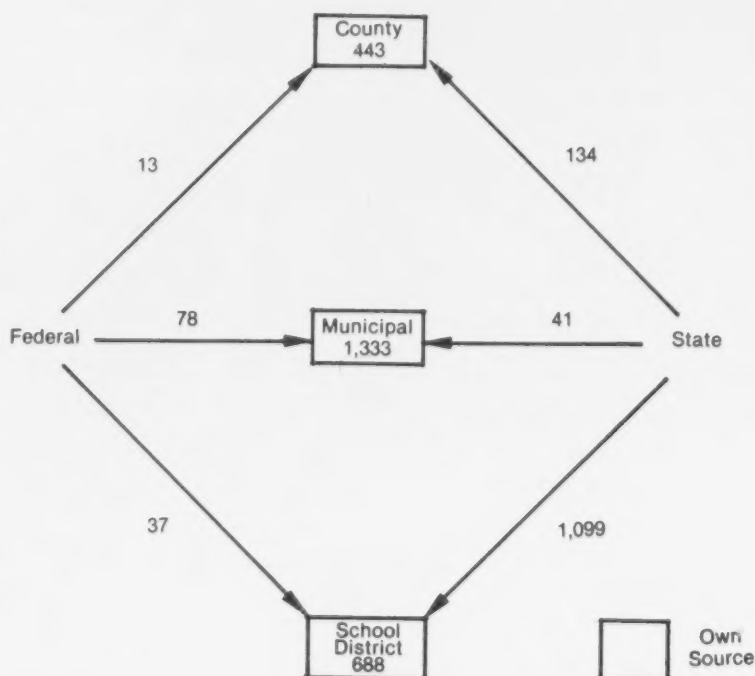


FIGURE 2
Intergovernmental Revenue for County, Municipal and
School District Units of Local Government, Oklahoma, Fiscal 1987
(amounts in millions of dollars)



Source: U.S. Bureau of the Census. *Government Finances in 1986-87*. Series GF-87-5, Washington, D.C.: U.S. Government Printing Office, 1988, p. 83.

	(millions)
State	\$4,105
Counties	1,133
Municipalities	2,536
School districts	387
Special districts	382
Total	\$8,544

Net borrowing (borrowing less repayments) during FY87 was reported to be \$281 million.

State Government Appropriations and Expenditures

State government is the focal point for broad policy-making for local as well as state government. State decisions about intergovernmental payments to local government, state statutes and regulations concerning the conduct and responsibilities of local government, and the state's general constitutional framework control much of local as well as state public finance in Oklahoma. The following discussion introduces the linkage between appropriations and expenditures, explores priorities exhibited by the FY85 and FY90 pattern of appropriations, and suggests the most pressing priorities likely to be encountered in the 1990s.

Appropriations and Expenditures

Oklahoma state tax revenues become available for direct expenditure or for intergovernmental payment through two basic procedures. The most prominent procedure is through the annual legislative appropriations process. This usually involves authorization for expenditure during a given fiscal year, although some appropriated funds are available for expenditure in more than one fiscal year. Because nearly three-quarters of state tax revenues flow into Oklahoma's general revenue fund from which appropriations are made, it is often impossible to connect specific tax sources with specific expenditures. One important exception involves earmarked taxes.

When a tax is earmarked, all or a fixed proportion of collections is automatically channelled to specific uses. For example, 35 percent of Oklahoma's motor vehicle license receipts flows to local schools, and a portion of the cigarette tax is used if needed to service state building bonds. Earmarking reduces the annual work that the legislature must accomplish with the appropriations process, and may make it easier for the recipient state agency or local jurisdiction to make long-range budget plans. More-

over, in some instances such as the allocation of motor fuel taxes to highway construction and maintenance, an earmarked tax performs much as a user fee; those using the state facility help pay for it.

In recent years, however, the Oklahoma Legislature has greatly reduced its use of tax earmarking. Lack of annual legislative oversight through the appropriations process is a principal reason for this shift in tax/expenditure policy. In addition, difficult budget problems associated with the shift from a boom to a bust economy have emphasized to the governor and the legislature the need to have as much flexibility as possible in the budget planning process. Earmarking, of course, removes the earmarked revenue/expenditure from direct budgetary discretion.

Many of state government's non-tax revenues are automatically allocated for specific programs of expenditures. Since the end of revenue sharing, this is true of virtually all federal funds received by the state. Other examples include higher education tuition, fees remaining with collecting institutions, receipts from the sales of services such as those of hospitals, and the allocation of revenue from school lands to education.

Overall, legislative appropriations account for less than half of all state government expenditures. In FY88, for example total appropriations were 43.5 percent of reported outlays from Treasury Funds (Table 8). Moreover, there is great variation in the degree to which appropriations finance the different functions of government. For example, in FY88 appropriations equalled 84.7 percent of Legal and Judiciary outlays, 89.8 percent of Corrections, and 71.7 percent of Mental Health. At the other end of the spectrum, Transportation received almost no appropriations because of its funding from earmarked fuel taxes.

Appropriations and Priorities: FY85 and FY90

Just as the total pattern of state and local government expenditures remains

TABLE 5
Local Government Intergovernmental Revenue
from State Government, Oklahoma and United States
Selected Years, Fiscal 1977 - 1987

Year	Revenue from State as a Percent of General Revenue		
	County	Municipal	School District
Oklahoma			
1977	34.0%	5.7%	57.0%
1983	33.4	2.7	64.4
1984	27.9	2.6	63.6
1985	25.6	3.0	61.0
1986	23.3	3.0	62.1
1987	22.1	2.8	58.9
United States			
1977	34.5	23.4	46.8
1983	32.3	20.3	51.3
1984	32.0	19.6	51.6
1985	31.2	20.1	52.0
1986	31.8	20.2	52.7
1987	31.7	20.3	52.8

Source: U.S. Bureau of the Census, *Governmental Finances*, Series GF, Washington, D.C.: U.S. Government Printing Office, 1987, 1983-1987, pp. 46, 63.

fairly stable over time, so too does the functional allocation of appropriations. Table 9 shows the functional breakdown of legislative appropriations in FY85 and FY90 with percentage shares carried to two digits. The patterns look rather similar in both years, even though the actual money involved rose from \$2.2 billion to nearly \$2.7 billion. Roughly half the appropriations goes to Education, and another fifth to the Department of Human Services.

A closer look at the FY85 and FY90 patterns suggests some changing priorities during the period. The third column in Table 9 records the difference in percentage shares for the functions between the two years; the algebraic sum of these differences adds to zero. Relatively large reductions in the shares were recorded for Transportation (-4.44 points), Supplemental Appropriations (-1.33 points) and Capital Outlay/Special Projects (-0.32 points). Increased earmarked motor fuel tax rates permitted the Oklahoma Legislature to essentially abolish highway appropriations in FY90, the Governor had some success in fighting the "pork" component of Special Projects, and a more stable state finance picture may have reduced the need for Supplemental Appropriations.

What functions picked up the lion's share of the 6.09 percentage points given up by Transportation, Supplementals, and Special Projects? The answer is easy to determine from Table 9. Four major functions gained most of what was reallocated. Education's share rose 2.01 points, the Department of Human Services (DHS) gained 1.45 points, and Public Safety (Corrections and Law Enforcement) rose 1.27 points. General Government (the hard-core of the executive branch) expanded by 1.00 point, but this expanded share was caused largely by the appropriations necessary to offset the elimination of earmarked revenues to the Oklahoma Tax Commission. This suggests that three broad components — Education, DHS, and Public Safety—occupied a higher priority during the 1989 legislative session than during 1984.

TABLE 6
Oklahoma's Tax System
Fiscal 1987

Type of Tax	All State and Local	State	County	Municipal	School District
Total Taxes (millions of dollars)	\$3,987	\$2,669	\$195	\$559	\$564
Percent by Type:					
General sales	26.3%	23.0%	3.1%	76.9%	—
Property	20.1	—	95.9	10.6	98.6%
Individual income	17.0	25.4	—	—	—
Severance	9.3	13.9	—	—	—
Motor vehicle license	5.5	8.2	—	—	—
Motor fuel	5.1	7.6	—	—	—
Alcoholic beverage and tobacco taxes	3.2	4.8	—	—	—
Corporate income	2.1	3.1	—	—	—
Other	11.4	14.0	1.0	12.5	1.4
Total	100.0	100.0	100.0	100.0	100.0
Addendum: Intergovernmental revenue per \$1.00 of tax receipts	\$.65	\$.42	\$.75	\$.21	\$2.01

Source: U.S. Bureau of the Census. *Government Finances in 1985-87*. Series GF-87-5. Washington, D.C.: U.S. Government Printing Office, 1988, p. 83.

TABLE 7
Federal Government Tax Burden and Distribution of Funds
in Oklahoma
Fiscal 1987^a

Tax Burden	Amount (millions of dollars)	Percent
Federal Tax Burden:		
Individual income tax	\$4,360	43.7%
Social insurance taxes	3,450	34.6
Corporate income tax	1,260	12.6
Highway trust fund taxes	267	2.7
Alcoholic beverage and tobacco taxes	134	1.3
Other excise taxes	275	2.8
Estate and gift taxes	229	2.3
Total tax burden	9,975	100.0
Federal Funds Distribution:		
Defense/nondefense		
Defense	2,348	23.3
Nondefense	7,721	76.7
Total distribution	10,069	100.0
Selected types		
Direct payments to individuals	5,209	51.7
Procurement	821	8.2
Grants to state-local governments	1,317	13.1
Salaries and wages	2,143	21.3
Other programs	579	5.7
Total distribution	10,069	100.0

Source: Tax burden: Tax Foundation. *Facts and Figures on Government Finance, 1988-1989* edition. Baltimore: John Hopkins University Press, 1988, p. 148; federal funds: U.S. Bureau of the Census. *Statistical Abstract of the United States, 1988*. Washington, D.C.: U.S. Government Printing Office, 1988, p. 312.

^aYear ending September 30.

TABLE 8
Appropriations as a
Percent of Expenditures
From State Treasury Funds
Oklahoma State Government
Fiscal 1988

Function of Government	Percent
Education:	
Higher education	51.2%
State aid to public schools	64.2
Vocational and technical education	77.6
Other education functions	146.9
Total education	60.5
General Government	48.9
Health Services:	
Public health & medical assistance	47.3
Mental health	71.7
Total health services	61.5
Legal and judiciary	84.7
Museums	84.4
Natural resources	46.7
Public Safety:	
Corrections:	89.8
Other public safety related	69.3
Total public safety	81.1
Regulatory Services	18.3
Social Services:	
Department of Human Services	35.5
Other social service related	4.3
Total social services	29.5
Transportation	1.5
Total	

Source: Office of State Finance, Schedules I and III, 1987, 1988.

State Priorities for the 1990s

The 1985-90 appropriations pattern brings to mind three sources of financial pressure which are bound to be important in setting Oklahoma state finance priorities during the '90s.

- Education will continue to gain significance as labor force skill requirements escalate rapidly and the U.S. emphasizes R&D activities to become more competitive worldwide.
- Drug-related and other types of crime will continue to stimulate demand for better law enforcement and expanded corrections systems.

TABLE 9
Relative Importance and Growth of Appropriations
Components, Oklahoma State Government
Fiscal Years 1985 and 1990

Function of Government	Percent of Total Appropriations		Difference
	1985	1990	
Education:			
Higher education	16.59%	17.00%	0.41%
State aid to public schools	32.10	32.70	0.60
Vocational and technical education	2.22	2.52	0.30
Other education functions	0.45	1.14	0.69
Total education	51.36	53.37	2.01
General Government	3.55	4.55	1.00
Health Services:			
Public health & medical assistance	1.82	1.83	0.01
Mental health	3.74	3.65	-0.09
Total health services	5.56	5.47	-0.09
Legal and judiciary	1.93	2.19	0.26
Museums	0.16	0.16	0.00
Natural resources	1.70	1.66	-0.04
Public Safety:			
Corrections:	4.45	5.25	0.80
Other public safety related	2.10	2.57	0.47
Total public safety	6.55	7.82	1.27
Regulatory Services	0.46	0.68	0.22
Social Services:			
Department of Human Services	19.84	21.29	1.45
Other social service related	0.67	0.68	0.01
Total social services	20.51	21.97	1.46
Transportation	4.77	0.33	-4.44
Total operations appropriations	96.55	98.20	1.65
Supplementals for FY-88	2.41	1.08	-1.33
Capital outlay/special projects	1.04	0.72	-0.32
Total	100.00	100.00	0.00

Source: Office of State Finance, Schedules I, 1984, 1988.

- Health care costs will continue to rise at a rapid pace; with an ageing population and growing uncompensated medical care, appropriations to the Department of Human Services will continue to increase more rapidly than most other functions. The state's health care costs will also rise because of its operation of health insurance programs for its own employees and for teachers.

One further pressure for increased state spending deserves special emphasis. The '90s will witness a renewed strong tendency for the state's population to concentrate in urban

areas—particularly in the large metropolitan centers. There is growing need to upgrade and expand municipal infrastructure, i.e. sewerage, water, streets, airports, parks, and other public works. State government itself has not had a capital improvements program since 1983. Added to this are serious deficiencies in Oklahoma's rural and intercity road network. In 1985-86, a Governor's Advisory Task Force on Infrastructure estimated conservatively an annual shortfall of infrastructure outlays of \$450 million per year for every year during a period ending in 2000. As Table 5 indicates, there are other states in which state government

provides a much larger flow of funds to municipalities. If infrastructure problems become more acute in Oklahoma, or if the state decides that major improvements are a necessary condition for significant economic growth, state government may be asked to spend much more in this field.

The following sources are useful for more information on state and local government finance.

Oklahoma State Government Expenditures in Brief. Oklahoma City: The Kerr Foundation, Inc. and the Grayce B. Kerr Funds, Inc.

Center for Economic and Management Research. *Statistical Abstract of Oklahoma.* Norman: University of Oklahoma.

U.S. Bureau of the Census. *Statistical Abstract of the United States.* Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census. Government Finance Series including *State Government Tax Collections*, *State Government Finances*, *City Government Finances*, *Government Finances*, and

County Government Finances. Washington, D.C.: U.S. Government Printing Office.

U.S. Advisory Commission on Intergovernmental Relations. *Significant Features of Fiscal Federalism.* Washington, D.C.: ACIR.

Tax Foundation. *Facts & Figures on Government Finance.* Baltimore: The Johns Hopkins University Press.

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Oklahoma's Widening Personal Income Gap

GERALD M. LAGE

INCOME COMPARISONS AMONG persons or regions in a market-oriented economy often serve as both an index of productive contributions and a measure of economic well-being for individuals, communities and states. Thus, as the level of Oklahoma's per capita personal income available for consumption, taxes and savings grew from 85 percent of the national average in 1970 to almost parity with the rest of the country in 1982, Oklahomans looked with pride at their good fortune, and presumably, good management, over the phenomenal decade of growth.

Since 1982, however, U.S. per capita personal income growth continued on its historical trend (see Figure 1) while Oklahoma's level grew considerably slower than the rate of inflation.¹ By 1987 Oklahoma's relative personal income per citizen had fallen back to only 81 percent of the national average, the lowest level of the ratio in the last 30 years. (1989 *Oklahoma Economic Outlook*.)

How could the per capita personal income of the citizens of Oklahoma have fallen so far behind the national average so fast? But then, after so many decades of lagging behind, how could it have caught up to the national average in the first place?

Complete answers to these questions require a detailed examination of regional responses to national and international economic forces and a careful analysis of state economic policies to unravel the system of incentives and barriers to economic activity of the private sector. The purpose of this brief note is to address the much simpler task of trying to identify the major sources of the widening gap so that more detailed policy research may recommend actions and incentives to attempt to reverse the alarming trends of the last half decade.

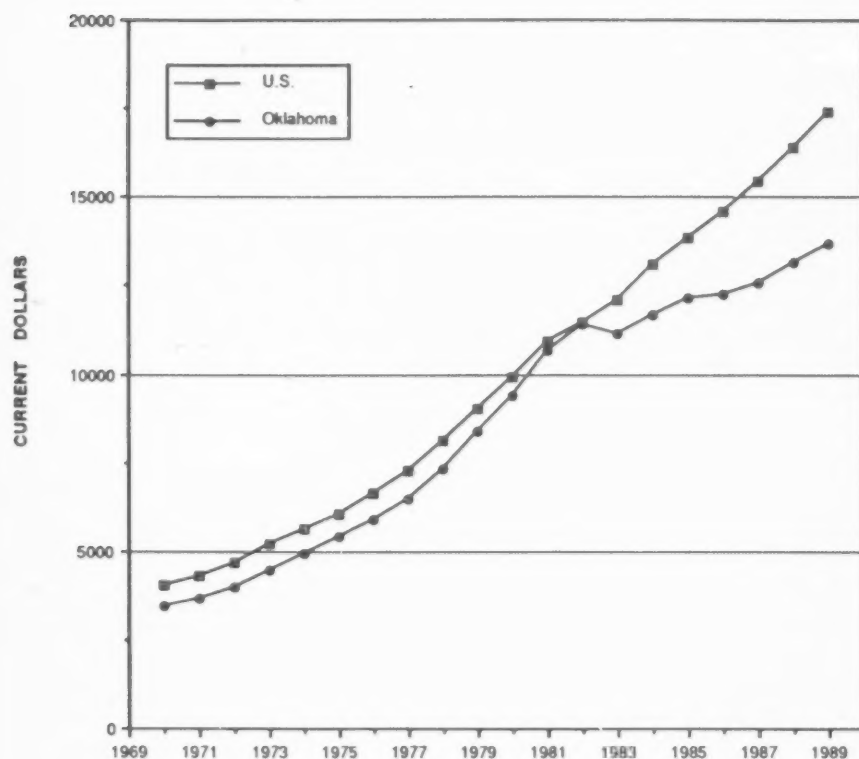
The conclusion that can be reached by reviewing recent personal income growth is that the narrowing of the per capita personal income gap during the 1970s can be related to the state's relative gains in almost every category of payments and a very substantial increase in the proportion of the state's population actively employed. Likewise, the source of the decline is broad-based, yet dominated by two substantial effects. First, Oklahoma's share of the workforce working at full and/or part-time jobs declined since 1982 while the national average rose substantially. And, second, there has been a low and relatively declining level of earnings-per-worker in major sectors of the state economy.

Analysis

The aggregate components of Oklahoma and U.S. per capita personal income for 1970, 1982 and 1987 are shown in Table 1. For each year, by definition of the U.S. Bureau of Economic Analysis (BEA), per capita income is computed as the sum of the following components: (1) the per capita dividends, interest and rent payments to residents of the state; (2) the per capita transfer payments that are paid to residents in a given period (the only payments not based on current production); (3) the earnings per capita derived by multiplying the earnings per employee times the employee to total population ratio (a workforce participation concept); and, (4) a residual that subtracts individuals' contributions to social insurance from personal income and adjusts the earnings for differences in individual's state of residence and state of employment.

The data reveal the general pattern of a closing state-national gap for aggregate per capita personal income and for each of its components (except for per capita transfer payments) from 1970 to 1982 and the reverse process (with the same exception) from 1982 to 1987. The ratio of Oklahoma to U.S. earnings per employee follows an almost

U.S. Versus Oklahoma Per Capita Income



Source: Oklahoma Economic Outlook

TABLE 1
Per Capita Personal Income Analysis

	Oklahoma			United States		
	1970	1982	1987	1970	1982	1987
Per Capita Personal Income	\$3,437	\$11,391	\$12,552	\$4,051	\$11,481	\$15,481
	(.85) ^a	(.99)	(.81)			
Dividends, Interest & Rent Per Capita	417	1,768	2,132	538	1,928	2,605
	(.78)	(.92)	(.82)			
Transfer Payments Per Capita	432	1,614	2,112	422	1,774	2,254
	(1.02)	(.91)	(.94)			
Earnings Per Employee	6,263	16,647	18,155	7,329	17,030	21,305
	(.85)	(.98)	(.85)			
Employee/Population Ratio	.427	.505	.482	.440	.485	.532
	(.97)	(1.04)	(.91)			
Earnings Per Capita	2,672	8,410	8,753	3,228	8,263	11,328
	(.83)	(1.02)	(.77)			
Residual	-84	-401	-445	-137	-484	-706
Residence Adjustment & Personal Contributions to Social Insurance	(.81)	(.83)	(.83)			

Source: Personal Income Data are from the U.S. Department of Commerce, Bureau of Economic Analysis, data tapes.

^aFigures in () represent ratios to corresponding national annual averages of the same year.

identical pattern to that of per capita personal income, which is not surprising since earnings are the largest single component of personal income. Notice, however, that even as the income gap almost closes in 1982, the individual components of per capita income in Oklahoma remain below the corresponding national averages except for one component—earnings per capita in Oklahoma rises above the national average despite a lower value of earnings per employee because a higher percentage of the state population is employed that year than is true for the nation as a whole. In a symmetrical way, the fall in relative per capita personal income from 1982 to 1987 is accentuated because the share of the state's population working at full or part-time jobs in Oklahoma falls by two percentage points as the national ratio rises by almost five percentage points. As these factors reinforce each other, Oklahoma's per capita earnings fall drastically from above the national average in 1982 to just over three-fourths of the national level in 1987. Declining job opportunities with the regional recession and severe reductions in earnings per worker add to the lower nonincome payments to prolong and reinforce Oklahoma's inflation-adjusted income recession for a total reduction of about 7 percent since 1982.

The role played by the ratio of Oklahomans with one or more jobs to the total population of the state compared to the national ratio in explaining the closing of the income gap has not been widely discussed, although the rapidly growing number of job opportunities at attractive rates of pay was obviously a salient feature of the 1970s. The downside in the recessionary environment of the mid-1980s has been substantially reduced employment opportunities and "discouraged-worker" withdrawals from the workforce exceeding losses in the state's population. Had 50.5 percent of Oklahomans been employed in 1987, rather than the actual 48.2 percent, at the 1987 rate of earnings per worker, the earnings per capita would have increased by \$415 and reduced the size of the 1987 per

capita personal income gap by 15 percent. Had Oklahoma matched the national ratio of 53.2 percent of the population with jobs at the 1987 state earnings rate, per capita earnings would have increased by \$905 and the 1987 per capita personal income gap would have been reduced by nearly one-third.

Obviously, policies that expand the typical occupational and industrial employment opportunities are a major consideration in stopping the deterioration of Oklahoma's economic well-being. The lack of such opportunities are not, however, the largest single source of the deficiency. The relatively low state average of aggregate earnings per employee holds that infamous distinction. If working Oklahomans in 1987 had been paid the U.S. value of earnings per employee of \$21,305 rather than the state average of \$18,155, the Oklahoma earnings per capita would have increased by \$1,516 and the per capita personal income gap would have decreased by 52 percent.² Why should the Oklahoma average earnings per employee be so much lower than the national average?

A slightly advanced step in the analysis of the *income gap* can be taken by asking whether the *earnings gap* is explained to a larger degree by (a) differences in the employment distribution in Oklahoma relative to the national industrial pattern—the industrial structure effect, or (b) differences in earnings per employee by type of industry locally vs. the national average—the wage and occupation effect.

Table 2 summarizes the results of two hypothetical calculations to compare with the actual pattern of earnings per employee observed in the three years of the analysis. Pattern "A" is determined by computing the earnings per employee in Oklahoma assuming Oklahoma wages were paid to the U.S. distribution of employment in the dozen aggregate divisions of the economy listed in Table 3. Pattern "B" results from the assumption of U.S. wages paid to the Oklahoma employment distribution of full and part-time workers.

The calculation in column 3 of earnings per employee for Pattern A—

TABLE 2
Earnings Per Employee
Oklahoma and the U.S.

	Actual	Pattern "A" Oklahoma Pay U.S. Jobs	Pattern "B" U.S. Pay Oklahoma Jobs
Oklahoma			
1970	\$ 6,263	\$ 6,464	\$ 7,137
1982	16,647	16,422	17,659
1987	18,155	18,589	21,180
United States			
1970	7,329		
1982	17,030		
1987	21,305		
U.S. - Oklahoma Earnings Gap			
1970	1,066	865	192
1982	383	808	-629
1987	3,150	2,716	125

Source: U.S. Department of Commerce, Bureau of Economic Analysis and author's calculations.

assuming Oklahoma had the national distribution of jobs by industry, but workers were paid the Oklahoma earnings per employee—results in a very modest increase (except for 1982) in the aggregate earnings per employee average for the entire state. Indeed, in 1982 with the national industrial structure, the state would have observed a larger income gap than actually occurred since this year was deliberately chosen as the best in recent times for the state economy.

The impact of being able to substitute national for state earnings per worker in each specific industry, while retaining the job distribution actually observed in the state in the relevant year (see column 4, Pattern B), is a dramatic reduction of the income gap for both 1970 and 1987. It is also a substantial reversal to Oklahoma's advantage in the boom year of 1982 when substantially better national earnings rates are applied to large employee shares in mining, construction, and other booming sectors in the state.

The overall conclusion seems clear enough. The largest single cause of Oklahoma's income recession is relatively low earnings per capita. This is caused by a level of earnings paid per employee substantially below the national average. In turn, this has been caused more substantially by low earnings in each major industry than by

any net effects of an industrial structure in Oklahoma that differs from the rest of the U.S.³

The pervasiveness of Oklahoma's low employee earnings in all major economic sectors is born out by the summary data in Table 3. This shows the differences in earnings per employee and the differences in the employment distributions of Oklahoma and the U.S. With a few exceptions in 1982, the level of earnings paid per employee in Oklahoma is consistently and substantially below the national average earnings rates.

The three right-hand-side columns of employment differences verify that Oklahoma employment opportunities are relatively more concentrated in farming, mining and government employment. Two of the Oklahoma industries, farming and mining, paid considerably less than average earnings per employee in 1987 while the local disadvantage for government workers was slightly less than average.

Oklahoma's share of employment in manufacturing is relatively low compared to the national average, but the earnings differences are far less than in most other sectors with substantial employment levels. The deterioration of mining earnings per employee (and to nearly the same extent in construction and finance, insurance and real estate) is painfully obvious with a local

TABLE 3
Earnings Per Employee and Employment Share Differences
U.S. Minus Oklahoma

	1982 Employment Share - Oklahoma (percent)	Earnings/Employee Difference U.S. - Oklahoma (current dollars)			Employment Distribution Difference U.S. - Oklahoma (percent)		
		1970	1982	1987	1970	1982	1987
Total	100.0	1,070	380	3,150	0.0	0.0	0.0
Farm	5.4	800	-120	3,960	-4.3	-2.2	-3.0
Agriculture, Forestry & Fisheries	0.5	920	-1,570	1,860	-.1	.3	.3
Mining	8.3	1,160	5,820	8,760	-3.4	-7.1	-4.2
Construction	5.5	1,750	1,930	4,540	-.2	-.8	.5
Manufacturing	11.4	830	240	1,570	9.4	5.8	4.9
Transportation, Public Utilities	4.9	630	430	930	.1	.1	-0-
Wholesale Trade	4.9	330	-670	3,490	.6	.1	.9
Retail Trade	15.6	550	-420	890	-0-	.4	.5
Finance, Insurance and Real Estate	6.1	1,130	1,140	5,630	.8	.9	.9
Services	19.0	1,080	730	3,130	1.5	4.3	3.1
Government	18.3	830	1,520	2,850	-4.5	-1.8	-3.9

Data Sources: Employment Statistics: Bureau of Economic Analysis, Full and Part-time Employment. Earnings Data: Bureau of Economic Analysis, Computer Files.

earnings disadvantage nearly three times the average level for all sectors. There simply are no sectors with substantial numbers of workers, except for manufacturing, where local earnings per employee approach the national level and thereby contribute a comparative advantage for closing the per capita personal income gap.

Conclusions

The analysis just reviewed provides evidence that Oklahoma's per capita personal income was, ever-so-briefly, able to touch the national average level as a result of narrowing gaps of the major income components plus a very hefty push from citizens' increased participation in the workforce with full and part-time jobs. The extremely rapid and devastating decline was likewise attributed to a combination of factors affecting all the components, but mostly to two substantial effects—a reduction in the percentage of the state population with jobs while nationally the rate has been rising, and the low levels of earnings per employee in all major sectors of the economy.

The lists of most likely fundamental causes of the income recession and of potential policies which might help move Oklahoma back into the mainstream of economic growth are far too long to catalog here.⁴ Nevertheless, a few comments might indicate the need for further analysis as the legislature and professional economic development organizations such as Oklahoma Futures contemplate state economic policies.

Relatively little can be done by the state to increase the overall level of economic activity. Competition among the states for existing businesses is generally considered to be non-productive from a broad perspective. Hence, economic development initiatives that promote new business formation, export market development and expansion of existing business have become the accepted fare. (Fosler, 1988)

What appears to be crucial to the next stage of policy analysis is a careful detailed investigation of why earnings per employee appear to be substantially below their national counterparts in almost all major industries making up the broad sectors of the economy shown in Table 3. The types of

hypotheses that come to mind as possible explanations include the following:

(a) Might Oklahoma's costs of living and doing business be enough lower than nationally so that real (cost-of-living adjusted) earnings are, in fact, near the national average?

(b) Can we substantiate the results found here that the net effect of the state's industrial structure is neutral, with relative earnings advantages in some industries cancelling disadvantages elsewhere? Or, are we beginning to observe an industrial mix disadvantage with the loss of well-paying professional positions in the petroleum refining industry and related chemical production, a small and slow-growing business services sector and a failure to observe any substantial gains in the high technology businesses? (See Lage and Doescher, 1989.)

(c) Is the job structure and management/production mix of Oklahoma industries such that workers have relatively fewer opportunities in the education-intensive, higher-paying job classifications? If so, why? Do state policies encourage location mostly of plants and businesses that provide fabrication and assembly, but not

management, financing and research functions? (Lage, July 1984)

Undoubtedly, a more refined analysis of the Oklahoma income gap will uncover cause and effect relationships that will suggest alternatives for wise use of state economic policies. Such analysis, however, must be the subject of later studies.

Notes

¹Since this research was essentially completed, a new study was released comparing personal income changes in nine regions of the nation. (Browne, 1989) The extremes in personal income growth are shown by the following quote from the introduction to that work: "New England's per capita income rose from 4 percent above the national average in 1979 to 20 percent above in 1987. Over the same period per capita income in the West South Central states fell from 7 percent below the national average to 15 percent below." See also the work by Friedenberg and DePass, 1989.

²The remainder of the gap, about 12 percent, is due to differences in the nonlabor income and

transfer payment components. Variations in residence adjustments are ignored for this approximation.

³As further evidence of this point, calculations of the author indicate that if Oklahoma earnings per worker in each 2-digit manufacturing industry equalled the national average, the 1988 average hourly earnings resulting from the state's industrial mix of \$10.03 would have exceeded the national average of \$9.64.

⁴See Olson, 1986, for a review of general economic development initiatives in Oklahoma and Lage, 1988, for international trade development recommendations.

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